BACK

MCQ BANK

OBJECTIVE ECOLOGY & ENVIRONMENT

ECOLOGY & ENVIRONMENT

BASED ON
NCERT | PRACTICE QUESTIONS
PREVIOUS YEAR QUESTIONS

UPSC IAS/CDS/NDA

STATE PCS/SSC/OTHERS

- **Features Indian Economy Book**
- Book is divided into Various sections
- Section I - NCERT based basic MCQs
- Section - II Practice Questions
- Section - III Previous year Questions
- Diffculty Level Easy Moderate Difficult
- Instant Answer Key for reference

MCQ Series For General Competition

ECOLOGY & ENVIRONMENT

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Based on

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Contents

NCERT Based Questions

Q1. Which of the following atmospheric gases constitute greenhouse gases:
(1) carbon dioxide (2) nitrogen
(3) nitrous oxide (4) water vapour Select the correct answer using the codes given below
(a) 1 and 3
(b) 1, 2 and 4
(c) 1, 3 and 4
(d) 1 and 4

Ans: (c)

Q2. The ecosystem comprises:
(a) all the individuals of a particular species living in an area
(b) all the animal species living in an area
(c) all the organisms living in an area
(d) all the living organisms and the non -living components in an area

Ans: (d)

Q3. With reference to green house gases, which of the following statement/s is/are true?
(1) greenhouse gases are responsible for global warming
(2) but for the greenhouse gases, our earth would have been too cold for life to exist
(3) atmospheric ozone,
(a) 1 only
(b) 1 and 3
(c) 1 and 2
(d) 1, 2 and 3

Ans: (d)

Q4. The reference to nature in Charles Darwin's theory of Evolution by Natural Selection was to
(a) All the living organisms around
(b) only the animals around
(c) the surrounding atmosphere
(d) the natural environment including the bi o-tic and abi-otic factors.

Ans: (d)

Q5. The ecological foot print is a measure of ecological impact of:
(1) consumption of food, forest products and other re-sources
(2) deforestation
(3) land use for roads, buildings, power plants, and gar-bage dumps.
Which of the above statements are true
(a) 2 only
(b) 3 only
(c) 1 and 3
(d) 1, 2 and 3

Ans: (d)

Q6. Coal is regarded as the worst enviro n-mental pollutant when burnt because its burning releases larger amounts of:
(1) Carbon dioxide
(2) Sulphur dioxide
(3) Nitrogen oxides (NOx)
(4) Methane Which of the above statements are true?
(a) 1 and 4
(b) 1, 2 and 3
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: (b)

Q7. More than 50% of the world's coal de-posits are held by:
(a) China, India and USA
(b) China, India and Russia
(c) India, Russia and USA
(d) USA, Russia, and China.

Ans: (d)

Q8. Crude oil is sometimes termed sweet because:
(a) it is sweet in taste due to dissolved sugars
(b) it is mildly sweet due to low sulphur co n-tent
(c) it is less acidic
(d) it is less alkaline

Ans: (b)

Q9. The natural environment refers to:
(a) the atmosphere in a forest
(b) the plants and animals in a forest

(c) the almostphere of an area - a forest, lake, or an ocean
(d) the living organisms and non-living objects or factors in an area undisturbed by human activity

Ans: (d)

Q10. The ultimate source of energy in a h y-droelectric power station is:
(a) the potential energy of water
(b) the kinetic energy of water
(c) the electro-chemical energy of water
(d) solar energy

Ans: (d)

Q11. Which of the following statements about natural gas are true?
1. natural gas is the cleanest fossil fuel
2. Saudi Arabia has the highest natural gas r e-serves
3. methane is the major compoment of natural gas
4. the natural gas is a product of tiny pla
(a) 1 and 4
(b) 2 and 3
(c) 1, 2, and 3
(d) 1, 3, and 4

Ans: (d)

Q12. The biosphere is the zone of earth where life is found. It includes parts of:
1. hydrosphere 2. lithosphere
3. stratosphere 4. troposphere Select the co r-rect answer from the following
(a) 1, and 4
(b) 2, 3, and 4
(c) 1, and 3
(d) 1, 2, and 4

Ans: (d)

Q13. Excessive emissions of carbon dioxide are responsible for ocean acidification. It means that:
1. oceanic waters become acidic
2. only the surface waters become acidic
3. the surface waters only become less alkaline
Select the correct answer from thos
(a) 1 only
(b) 2 only
(c) 2, and 3
(d) 3 only

Ans: (d)

Q14. Some of the organic compounds have been found to he highly toxic to human health and are banned. They are known as persistent organic pollutants. This means that
1. these compounds cannot be broken down by plants or animals
2. being water-soluble, th
(a) 1 and 4
(b) 2 and 3
(c) 1, 3, and 4
(d) only 2

Ans: (c)

Q15. Which one of the following countries has the highest natural gas reserves?
(a) Iran
(b) Qatar
(c) Russia
(d) Saudi Arabia

Ans: (c)

Q16. The liquified petroleum gas (LPG) is produced during refining of crude oil, its major components are:
(a) Methane and butane
(b) Methane and ethane
(c) Propane and butane
(d) Propane and methane

Ans: (c)

Q17. The heavy water nuclear reactors use heavy water to slow down the speed of ne u-trons. Which one of the following countries is the largest producer of such water?
(a) Canada
(b) India
(c) Russia
(d) U.S.A.

Ans: (b)

Q18. Which of the following statement/s is/are true?
1. A majority of nuclear power plants in the world have light-water reactors

2. Unlike light-water reactors, the heavy water reactors require enriched uranium (U-235)
3. The light-water is called as suc
(a) 1 and 4
(b) 2 and 4
(c) 2 and 3
(d) only 1

Ans: (d)

Q19. Crude oil is sometimes labelled as sour because:
(a) It is more acidic.
(b) It is more alkaline.
(c) It has higher amounts of sulphur.
(d) It has lower levels of sulphur.

Ans: (c)

Q20. A recent study by The Energy and R esourcs Institute (TERI) has found very high levels of ozone in Delhi, which is a cause of concern because:
(a) it is indicative of the depletion of ozone layer
(b) it indicates that atmospheric oxygen (O2) is being converted into ozone (O3).
(c) it shows that there are high levels of poll utants like nitrogen oxides (NO) that react with hydrocarbons, in the presence of sunlight to produce ozone.
(d) it shows that there are high levels of poll utants in the atmosphere, such as carbon monooxide (CO) and carbon dioxide (CO2) that react with hydrocarbons in the presence of sunlight to produce ozone.

Ans: (c)

Q21. Examine the following statements carefully and select your answer from the codes given below Assertion *(A)*: The WTI (West Texas Intermediate) crude is consi dered of better quality than Dubai and the Brent crude because Reason *(R)*: It is light and swe
(a) Both A and R are true and R is the correct explanation of A
(b) Both A and R are false
(c) A is true but R is false
(d) A is false but R is true

Ans: (a)

Q22. A recent study of the human belly bu tton biodiversity has indicated that:
1. There are more than a 1000 strains of bact eria found in this region
2. There are more than 600 new strains of ba cteria lurking in this region
3. There are 100 strains of bac
(a) 1 only
(b) 3 only
(c) 1 and 2
(d) None of the above

Ans: (c)

Q23. Which of the following is the most chemically polluted city in the world?
(a) Dzerzhinsk (Russia)
(b) La Oroya (Peru)
(c) Linfen (China)
(d) Sum gayit (Azerbaijan)

Ans: (a)

Q24. The Central Pollution Control Board, in collaboration with IIT-Delhi found many of our industrial clusters critically polluted. Which of the following was found to be most polluted?
(a) Ankleshwar
(b) Ghaziabad
(c) Ludhiana
(d) Vellore

Ans: (a)

Q25. Which of the following city in India is considered the greenest?
(a) Bangalore
(b) Chandigarh
(c) Delhi
(d) Thiruvananthpuram

Ans: (b)

Q26. The algal blooms are not always harmful as many of the algae are non -toxic and provide useful nourishment to the fishes and other animals. Which of the following are such algae?
(a) Alexandrium, Dinophysis and Noctiluca
(b) Dinophysis, Gymnodinium and Trich o-desmium

(c) Noctiluca, Trichodesmium and Aphan i-zomenon
(d) Trichodesmium, Aphanizomenon and D i-nophysis

Ans: (c)

Q27. The Chernobyl accident is regarded as the worst nuclear disaster in history. The moderator, that slows down the speed of neutrons, used in this plant was:
(a) Heavy water
(b) Light water
(c) Mica
(d) Solid graphite

Ans: (d)

Q28. Which of the following Indian city can boast of having the largest deployment of rooftop solar water heaters
(a) Ahmedabad
(b) Bangalore
(c) Mumbai
(d) Pune

Ans: (b)

Q29. Which one of the following countries is the largest solar power producer in the world?
(a) China
(b) Germany
(c) Japan
(d) USA

Ans: (b)

Q30. A wind farm is:
(a) A farmland using wind energy for irrig a-tion
(b) A farmland using wind energy for running the farm machinery
(c) A group of wind turbines to produce ele c-tricity
(d) A windy farmland

Ans: (c)

Q31. The biodiversity study of human gut flora has indicated that
(1) It comprises bacteria, fungi and protozoa
(2) The relationship between gut flora and h u-mans is symbiotic
(3) There are 30 -40 species of different m i-crobes in our intestines
(4) The gut
(a) 1 and 4
(b) only 3
(c) 1, 2 and 3
(d) 1, 2 and 4

Ans: (d)

Q32. A fighter pilot from the U.S. Air Force flew a fighter jet at a speed upto one and a half times the speed of sound on a 50/50 blend of petroleum -based fuel and biofuel from:
(a) Agave americana
(b) Camelina sativa
(c) Jatropha
(d) Maize

Ans: (b)

Q33. The name magma is encountered at times during discus-sions of energy r e-sources. It refers to:
(a) A product obtained during refining of crude oil
(b) A product obtained during processing of natural gas
(c) A mixture of molten rock, volatiles, and solids found beneath the surface of earth
(d) A mixture of hydrocarbons

Ans: (c)

Q34. The Geysers is/are:
(a) An electrical gadget fixed in our bathrooms for heating water
(b) Central heating device in homes in many of the western countries
(c) A place in Sweden with hot water springs
(d) A complex of geothermal power plants in U.S.A. 35. The International Geothermal A s-sociation organises World Geothermal Co n-gresses every five years. The last congress was held in 2010 in:

Ans: (d)

Q
(a) Italy
(b) Indonesia
(c) Japan
(d) Turkey

Ans: (b)

Q36. Which one of the following statements about compressed Natural Gas (CNG) is not true?
(a) It is environmentally much cleaner than the other fossil fuels
(b) It is obtained during refining of crude oil
(c) It comprises primarily methane
(d) Unlike LPG, it is not liquified

Ans: (b)

Q37. The Geological Survey of India has identified Puga valley as the most promising geothermal field for power generation. It is located in:
(a) Arunachal Pradesh
(b) Kerala
(c) Ladakh
(d) Manipur

Ans: (c)

Q38. Assertion *(A)*: The geothermal energy is considered clean, cost-effective, and sustainable but there are some environmental concerns because:
Reason *(R)*: The fluids drawn from deep inside the earth carry a mixture of gases like carbon dioxide, ammonia
(a) Both A and R are true and R is the correct explana-tion of A
(b) Both A and R are false
(c) A is true but R is false
(d) A is false but R is true

Ans: (a)

Q39. Pyrolysis is a term often encountered in discussions on waste disposal which one of the statements about it given below is not true?
(a) It is a thermochemcial decomposition of organic waste.
(b) It converts the waste into solid, liquid, and gas of which the liquid and gas can be used to produce energy.
(c) The process occurs at temperatures above 430°C at atmospheric pressure.
(d) The process occurs under high pressure at temperatures above 430°C.

Ans: (c)

Q40. Consider the following statements:
(1) Biodiversity rich areas have day temper atures between 18° and 32°C and annual rainfall below 150 cm
(2) Areas with annual rainfall above 150cm and day temperatures between 18° and 32°C are richer in biodiversity
(a) 1 only
(b) 1 and 3
(c) 2 and 3
(d) 2 only

Ans: (c)

Q41. The Red Data Books published by the International Union for Conservation of Nature and Natural Resources
(IUCN) enumerate:
(a) Biodiversity parks and wild life sanctuaries in different countries
(b) Centres of origin of cultivated plants and domesticated animals
(c) Centres of origin of all economically i mportant plants
(d) Threatened species of plants and animals

Ans: (d)

Q42. A biome is:
(a) A complex of communities characterised by distinctive climate and vegetation
(b) A delimited area
(c) A collection of rare plants and animals
(d) A group of plants growing in a particular area

Ans: (a)

Q43. The biosphere refers to:
(a) The atmosphere surrounding the living o rganisms
(b) The area of the land inhabited by living organisms
(c) The part of o cean inhabited by plants and/or animals
(d) The portion of the earth, including the oceans, the land, the soil and the atmosphere inhabited by living organisms

Ans: (d)

Q44. There has been an increasing incidence of floods in northern India in recent years because:
(a) There has been an increase in annual rai n-fall
(b) The ice has been melting faster due to slight increase in atmospheric temperature
(c) There has been increased deforestation in the catchment area
(d) The rate of silting of dams has gone up

Ans: (c)

Q45. The Basel convention is an intern a-tional treaty concerned with:
(a) Conservation of biodiversity
(b) Depletion of ozone layer
(c) Control of transboundary movements of hazardous wastes and their disposal
(d) Regulation of environmental impact of pro-jects having transboundary effects

Ans: (c)

Q46. Consider the following statements:
1. Coal is the worst pollutant when burnt b e-cause it releases higher amounts of carbon d i-oxide.
2. The environment in a city park is an exa m-ple of natural environment.
3. But for the green house gases, our earth wou

(a) 1 and 3
(b) Only 3
(c) 2 and 4
(d) 1, 2, and 4

Ans: (b)

Q47. Study the following pairs:
Treaty Field
1. Montreal Protocol International treaty to protect the ozone layer
2. Basel Convention Treaty for conservation of biodiversity
3. Kyoto protocol An update of 1994 conven-tion on climate change
4. Vienna conven

(a) 1 and 3
(b) 1 and 4
(c) 2 and 4
(d) 1, 2 and 4

Ans: (a)

Q48. Study the following statements:
1. Wind energy is a clean and renewable ene r-gy that does not produce any pollutants
2. Wind farms are large agriculture farms u s-ing wind energy to run their farm equipments.
3. A wind farm comprises a group of wind tur

(a) Only 1
(b) 1 and 3
(c) 1 and 4
(d) 1, 3 and 4

Ans: (d)

Q49. The world's largest onshore wind farms are located in which of the following countries?
(a) China, Denmark and U.K.
(b) USA, China and India
(c) U.K., China and India
(d) China, USA and Germany

Ans: (b)

Q50. Coral reefs are complex ecosystems. Which of the following organisms constitute their biotic communities?
1. Polyps 2. Sea Urchins
3. Red algae 4. Zooxanthellae Select the co r-rect answer using the codes given below:

(a) 1 and 3
(b) 2 and 4
(c) 1, 2 and 4
(d) 1, 2, 3 and 4

Ans: (c)

Q51. Consider the following pairs:
Book/Monograph Author
1. The structure and : C. Darwin distribution of coral reefs
2. Global Biodiversity : R.E. Hawkins assess-ment
3. Fundamentals of : E.P. Odum Ecology
4. Natural Hazards : J. White Which of the above

(a) 1 and 3
(b) Only 3
(c) 2 and 4
(d) 1, 3 and 4

Ans: (d)

Q52. Consider the following statements:
1. Global warming due to increased enviro n-mental pollution has resulted in significant i n-crease in the maximum wind speed of tropical cyclones.
2. Biodiesel is the most common biofuel in Brazil.
3. China is the larg
(a) Only 1
(b) 1 and 3
(c) Only 2
(d) 1, 2 and 3

Ans: (b)

Q53. The persistent organic pollutants (POPs) are considered harmful to human health and, therefore, their production and distribution is banned.
Which of the following is/are such compound?
1. Aldrin 2. DDT
3. Glutathione 4. Toxaphene Select the correct
(a) 1 and 3
(b) 1, 2 and 4
(c) 3 and 4
(d) 1, 2, 3 and 4

Ans: (b)

Q54. The plants of the mustard family are protected against most herbivores by the mustard oil they produce but the caterpi l-lars of the cabbage butterfly have learnt to breakdown these compounds to feed upon them eliminating their competitors. This kind o
(a) Commensalism
(b) Coevolution
(c) Mutualism
(d) Symbiosis

Ans: (b)

Q55. Consider the following statements:
1. Annual plants are often obundant in deserts
2. The tropical rain forest is the richest biome in terms of number of species because its soil is highly fertile.
3. Increasing use of chemical fertilizers on our crop
(a) 1 and 3
(b) 2 and 4
(c) Only 2
(d) 1, 3 and 4

Ans: (d)

Q56. Which of the following country has the largest offshore wind park?
(a) China
(b) Germany
(c) U.K.
(d) USA

Ans: (c)

Q57. Consider the following pairs:
Wind Farm/Park Country
1. Alta oak farm : USA
2. Gansu wind farm : China
3. Jaisalmer : India
4. Fowler Ridge : U.K Which of the above pairs are correctly matched?
(a) 1 and 3
(b) 1 and 4
(c) 2 and 3
(d) 2, 3 and 4

Ans: (c)

Q58. Consider the following statements:
1. Insects feeding on plants that are lacking specific chemical defenses are cryptically co l-oured
2. China is the highest hydroelectricity power producer in the world.
3. The Piped Natural Gas (PNG) that we r e-ceive
(a) 1 and 3
(b) 2 and 4
(c) 2 and 3
(d) 1, 2 and 4

Ans: (d)

Q59. An international treaty to eliminate or restrict the production and distribution of persistent organic pollutants
(POPs) that pose a serious threat to human health was adopted at which of the following convention?
(a) Basel Convention
(b) ESPOO Convention
(c) Stockholm Convention
(d) Vienna Convention

Ans: (c)

Q60. Different organisms evolve various mechanisms to protect themselves from their predators/enemies. Which of the following are such mechanisms/devices?
1. Aposematic colouration
2. Mimicry
3. Plant thorns, prickles, and spines
4. Production of toxic ch
(a) 1 and 4
(b) 2 and 4
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: (d)

Q61. Coral reefs are considered fragile ecosystems. What could be the reasons?
1. Agriculture and urban runoff pollute coastal waters resulting in algal blooms
2. They are sensitive to water temperatures.
Which of the above is/are the correct reason/s ?
(a) Only 1
(b) only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q62. Consider the following statements:
1. The crude oil is sometimes labeled as sour because it has higher content of sulphur
2. The spent fuel rods in an atomic power station are not radioactive as the radioactive fuel has been used
up.
3. A major part
(a) 1 and 3
(b) 1 and 4
(c) 2 and 4
(d) 1, 3 and 4

Ans: (d)

Q63. Wind energy is a clean and renewable energy resource being used for power generation. Which of the following Indian states are the leading harvesters of this energy?
(a) Rajasthan, Maharastra, Madhya Pradesh and Orissa
(b) Maharashtra, Tamil Nadu, Orissa and West Bengal
(c) Tamilnadu, Maharashtra, Gujarat and Rajasthan
(d) Gujarat, Maharashtra, Rajasthan and Orissa.

Ans: (c)

Q64. The increasing use of electronic goods in our country is resulting in a glut of electronic waste (e-waste) which is considered to be one of the most dangerous wastes as many of its components are toxic. An e - waste recycling/ processing company has, h
(a) 1 and 3
(b) 2 and 3
(c) 1, 2 and 4
(d) 1, 2, 3 and 4

Ans: (d)

Q65. Some accidentally introduced plants in our country have become obnoxious weeds threatening our native species and the environment. Which of the following are such invasive plants?
1. Eichhornia 2. Geranium
3. Moringa 4. Parthenium Select the correct
(a) 1 and 4
(b) 2 and 4
(c) 2 and 3
(d) Only 4

Ans: (a)

Q66. Consider the following statements.
1. Plants growing in temperate climate are usually long-day plants.
2. The seeds of desert plants are often hard and thick.
3. Oligotrophic lakes are rich in biodiversity because they have abundant supply of mineral
(a) 1 and 3
(b) 2 and 4
(c) 1, 2 and 4
(d) 1, 2, 3 and 4

Ans: (c)

Q67. Insects feeding on the plants of the milkweed family that produce poisonous glycosides to protect themselves from herbi-

vores are brightly coloured. What could be the reason/s?
1. The glycosides have toxic effect if broken down..
These insects, theref
(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q68. The geothermal power is considered environmentally friendly and cost effective. What is the real source of this energy?
1. It is the thermal energy stored in the earth.
The earth's core continues to be hot and its energy comes from the original forma
(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q69. Consider the following statements about shale gas:
1. It is the natural gas found in fine -grained organic-rich rocks
2. The major components of shale gas are pr o-pane and butane.
3. It is held free in the tiny rock pores or spa e-es or in solution withi
(a) 1 and 3
(b) 1 and 4
(c) 2 and 4
(d) 1, 2, 3, and 4

Ans: (a)

Q70. Which of the following statement/s about tight oil is/are not true?
1. It is petroleum light crude oil held in fine -grained, low-permeability rocks.
2. Tight oil formations under marine cond i-tions are difficult to extract as they are held more tightl
(a) Only 3
(b) 1 and 3
(c) Only 1
(d) 2 and 3

Ans: (b)

Q1. In which one of the following countries, the anoxic basin, Manager Fjord is located?
(a) Denmark
(b) Canada
(c) Venezuela
(d) Gulf of Mexico

Ans: (a)

Q2. In which sea, Gotland Deep, an anoxic basin is found?
(a) Mediterranean sea
(b) Caspian sea
(c) Black sea
(d) Baltic sea

Ans: (d)

Q3. Anoxic conditions emanate from:
1. Density stratification
2. Stagnation
3. Inputs of inorganic and organic materials
4. Strong thermoclines
(a) 1, 2
(b) 2, 3, 4
(c) 1, 2, 4
(d) 1, 2, 3, 4

Ans: (c)

Q4. Islands suffering extreme habitat d e-struction include
1. New Zealand 2. West Africa
3. Philippines 4. Madagascar
(a) 1, 2, 3
(b) 1, 2, 4
(c) 2, 3, 4
(d) 1, 3, 4

Ans: (d)

Q5. Regions of unsustainable agriculture or having unstable government or both, that typically suffer high rates of habitat d e-struction, are:
1. Japan
2. Central America
3. Sub-Saharan Africa
4. Amazonian tropical forests in South Amer i-ca
(a) 1, 2
(b) 1, 2, 3

(c) 2, 3, 4
(d) 1, 2, 3, 4

Ans: (c)

Q6. The natural cause of whitening of corals i.e. coral bleaching is:
(a) Increased photosynthetically active radi a-tion and UV light band
(b) Changes in salinity of sea water
(c) Increased or reduced temperature of sea water
(d) Stress-introduced expulsion or death of their symbiotic protozoa, zooxanthellae

Ans: (d)

Q7. The most endangered Asiatic top preda-tor on the edge of extinction is:
(a) Siberian Tiger
(b) Dhole
(c) Black bear
(d) Asiatic lion

Ans: (b)

Q8. According to the International Union for Conservation of Nature and Natural Re-sources, the number of extinction of species documented between 1500 and 2009, have been:
(a) 754
(b) 875
(c) 917
(d) 679

Ans: (b)

Q9. "Cattle rustling" refers to:
(a) Infertile cattle of no use to man
(b) Poaching
(c) Theft of cattle
(d) Stray cattle

Ans: (c)

Q10. Extant species are:
(a) Loss of species due to extinction of another species
(b) Those which are not extinct
(c) Threatened species
(d) Species undergoing mass extinctions.

Ans: (b)

Q11. Environmental degradation is the d e-terioration of the environment through
1. Depletion of resources such as air, water and soil
2. Destruction of ecosystems
3. Progressive increase in wild life
4. Extinction of wild life
(a) 1, 2, 3
(b) 1, 2, 4
(c) 1 only
(d) 2, 4 only

Ans: (b)

Q12. Which of the following is not a biod i-versity hotspot?
(a) Succulent Karoo
(b) Wallacea
(c) Cerrado
(d) Antigua

Ans: (d)

Q13. Following the addition of artificial or non-artificial substances such as nitrates and phosphates through fertilizers or se w-age to a fresh water body, there is:
1. Great increase of phytoplankton
2. Enhanced growth of aquatic vegetation i.e. phytopla
(a) 1, 2, 3
(b) 1, 2, 4
(c) 2, 3, 4
(d) 1, 2, 3, 4

Ans: (b)

Q14. Biodiversity hotspots resulting from extremely dense human population leading to destruction of natural habitats, are found in
1. China 2. India
3. Bangladesh 4. Indonesia
(a) 1, 2, 3
(b) 2, 3, 4
(c) 1, 2, 4
(d) 1, 2 only

Ans: (c)

Q15. The overfishing and destruction of the Great Banks; the destruction of salmon runs on rivers having been dammed; and

the devastation of sturgeon fishery on the Columbia river in the northwest United States exemplify:
(a) Resources depletion
(b) Overfishing and overpopulation
(c) Overpopulation in companion animals
(d) Tragedy of the commons.

Ans: (d)

Q16. The outlawed practice of blast fishing remains widespread in:
1. Malaysia 2. Tanzania
3. Indonesia 4. Coastal Africa
(a) 1, 2, 3
(b) 1, 3, 4
(c) 2, 3, 4
(d) 1, 2, 4

Ans: (c)

Q17. Cause/s for the rapid decline of global shark populations is / are:
1. Illegal, unreported and unregulated (IUU) fishing
2. Shark finning
3. Bottom trawling
4. Blast fishing
(a) 1 only
(b) 2 only
(c) 1, 2, 3
(d) 2, 3, 4

Ans: (b)

Q18. In which one of the following biogeographical regions, the biodiversity hotspot, Caribbean Islands is found?
(a) Africa
(b) North and Central America
(c) South America
(d) Europe and Central Asia

Ans: (b)

Q19. Region of the Earth that is extremely biologically diverse and also under severe threat due to habitat loss, climate change or extensive species loss is:
(a) Threatened
(b) Endangered
(c) Critically endangered
(d) Biodiversity hotspot

Ans: (d)

Q20. Maputaland -Pondoland- Albany is a biodiversity hotspot found in:
(a) Asia Pacific
(b) South America
(c) Europe and Central Asia
(d) Africa

Ans: (d)

Q21. Apart from pesticide misuse, other factors that pose a constant threat to bee populations and thus being responsible for pollinator decline are:
1. rapid transfer of parasites and diseases of pollinator species
2. loss of habitat and forage
3. hive d
(a) 1, 2
(b) 2, 3
(c) 1, 2, 3, 4
(d) 2, 3, 4

Ans: (c)

Q22. In the ongoing Holocene extinctions that continue into the 21st century include:
1. Siberian Tiger 2. Giant Panda
3. Atlas Bear 4. Giant Haast's eagle
(a) 1, 2
(b) 2, 3
(c) 1, 2, 3 (4) 2, 3, 4

Ans: (b)

Q23. The richest and most diverse hotspot containing about a sixth of plant life in less than 1% of the world's land area is:
(a) Tumbes-Choco-Magdalenda
(b) Tropical Andes
(c) Mediterranean Basin
(d) Mesoamerica

Ans: (b)

Q24. The greatest threat to the world's coral reef systems emanates from:
(a) UV light band
(b) Starvation caused by decline in zooplankton
(c) Cyanide fishing

(d) More frequent coral bleaching

Ans: (d)

Q25. Which of the following ecosystems are not managed by humans?
(a) Urban parks
(b) National parks
(c) Farms
(d) Plantations

Ans: (b)

Q26. Match the items in List I with those in List II and select the correct answer from the codes given below:
List I List II Ecosystem Services Ecosystem service
(Type) benefits
A. Supporting 1. Recreational and aesthetic
B. Provisioning 2. Adjusting cli
(a) 1 2 3 4
(b) 2 4 1 3
(c) 3 4 2 1
(d) 4 3 2 1

Ans: (c)

Q27. Paclitaxel employed in treating breast and ovarian cancer was derived from:
(a) Polar bear
(b) Pacific Yew tree
(c) Cetaceans
(d) Pine tree

Ans: (b)

Q28. Treatment for divers suffering from decompression sickness comes from:
(a) Sharks
(b) Cetaceans
(c) Polar bears
(d) Cobra venom

Ans: (b)

Q29. Unique antimicrobial compounds that may lead to the use of more effective antib i-otic treatments without the development of antibiotic resistance are extracted from:
(a) amphibians
(b) alligators
(c) wormwood plant
(d) snake venom

Ans: (a)

Q30. Chemical substances that may be able to treat macular degeneration causing blindness, are extracted from:
(a) Penicillin fungus
(b) Amphibians
(c) Scorpions
(d) Sharks

Ans: (d)

Q31. A new pain killer stronger than mo r-phine was found in the venom of:
(a) Horse-shoe crab
(b) Krait
(c) Cone-snail
(d) Scorpion

Ans: (c)

Q32. Polar bears hold cures for:
1. osteoporosis
2. breast cancer
3. kidney failure
4. Type II diabetes
(a) 1, 2
(b) 2, 3
(c) 2, 3, 4
(d) 1, 3, 4

Ans: (d)

Q33. Blast fishing carried out by use of e x-plosives to stun or kill fish for easy colle c-tion, though outlawed, is still widespread in:
1. Tanzania and Indonesia
2. Bangladesh
3. North Sea and Grand Banks
4. Aegean Sea and coastal Africa
(a) 1, 2
(b) 3, 4
(c) 1, 3
(d) 1, 4

Ans: (d)

Q34. The removal of ginseng growing in the Great Smoky Mountain National Park is an example of
(a) Stealing
(b) 'Plant rustling'
(c) Theft

(d) 'Plant poaching'

Ans: (d)

Q35. The greatest threat to organisms and biodiversity is

(a) Process of habitat loss
(b) Species extinction all over the world
(c) Reduced carrying capacity of the habitat
(d) Biodiversity hotspots.

Ans: (a)

Q36. The biodiversity hotspot that enco m-passes Mexico's main mountain chains, is o-lated mountaintop island in Baja California and southern United States is

(a) Mesoamerica
(b) Caribbean Islands
(c) Madrean Pine-oak Woodlands
(d) California Floristc Province

Ans: (c)

Q37. Enhanced growth of aquatic vegeta-tion in respect of phytoplankton and algal blooms through eutrophication

1. disrupts natural functioning of ecosystem leading to lack of O2 needed for survival of fish and other aquatic animals
2. causes decreased bio

(a) 1 only
(b) 2, 3
(c) 1, 2, 3
(d) 1, 2, 4

Ans: (c)

Q38. Island endemic populations are more prone to extinction from overexploitation as:

1. they occur at low densities
2. they succumb to climate change due to i n-creased CO2
3. they are reaching reduced reproductive rates
4. they face constant threat due t

(a) 1, 2
(b) 1, 3
(c) 2, 3
(d) 1, 2, 3, 4

Ans: (b)

Q39. Cambrian explosion occurred around

(a) 580 million years ago
(b) 542 million years ago
(c) 530 million years ago
(d) 260 million years ago

Ans: (c)

Q40. Which of the following statements are true?

1. Cambrian explosion precedes Phanerozoic Eon.
2. Cambrian explosion is also called Cambrian radiation
3. Cambrian explosion was marked by rapid appearance of major phyla
4. A single landmass known as Pang

(a) 1, 2
(b) 2, 3
(c) 1, 2, 3
(d) 2, 3, 4

Ans: (b)

Q41. Artemessin, one of the most antimala r-ial drugs used today, is extracted from:

(a) Neem tree
(b) Wormwood plant
(c) Cinchona tree.
(d) Neem and cinchona tree.

Ans: (b)

Q42. The rich biodiversity of India is under severe threat due to:

1. Habitat destruction
2. Degradation
3. Fragmentation
4. Overexploitation

(a) 1, 2, 3
(b) 2, 3, 4
(c) 1, 3, 4
(d) 1, 2, 3, 4

Ans: (d)

Q43. The Black Death was one of the most devastating pandemics in human history that killed around 60% of Europe's popula-tion due to:

(a) pneumonia
(b) plague
(c) smallpox
(d) tuberculosis

Ans: (b)

Q44. 10–20% of the world's drylands that have been degraded include:
1. savannahs 2. temperate forests
3. shrublands 4. deciduous grasslands
(a) 1, 2
(b) 1, 3
(c) 1, 2, 4
(d) 2, 3, 4

Ans: (b)

Q45. The major threat to the Asiatic black bear is:
1. poaching
2. loss of habitat
3. increased confrontation with man
4. commercial trade in bear parts
(a) 1 only
(b) 2, 3
(c) 2, 3, 4
(d) 1, 2, 3, 4

Ans: (d)

Q46. Despite an impressive count of Asian elephant between 25000 to 27000, one of the biggest threats facing the elephant in India is:
1. Gradual loss of habitat
2. Confinement to fragmented forests
3. Fragmentation of habitat due to develo p-mental activit
(a) 1, 2
(b) 1, 3
(c) 1, 3, 4
(d) 2, 3, 4

Ans: (b)

Q47. Consider the following statements:
1. Eutropication disrupts natural functioning of the ecosystem bringing about negative env i-ronmental effects.
2. Enhanced growth of the phytoplankton and algal blooms leads to lack of oxygen in the water body result
(a) 1, 2
(b) 1 only
(c) 2 only
(d) Neither 1 nor 2

Ans: (a)

Q48. Study the following statements:
1. Unlike in India, no unwanted stray dogs and cats are seen on streets or in the residential localities in the United states.
2. In the United States alone, between 3 and 5 million stray dogs and cats are euthanized e
(a) 1, 2 only
(b) Neither 1 nor 2
(c) 1 only
(d) 2 only

Ans: (a)

Q49. Consider the following statements:
1. HIV entered the humans via infected pr i-mates which remain essential models for stu d-ying AIDS.
2. As a result of habitat loss and bushmeat trade, many primate species are endangered and this will deprive chances o
(a) 1, 2
(b) 2 only
(c) 1 only
(d) Neither 1 nor 2

Ans: (c)

Q50. The IUCN lists the dugong as a species especially vulnerable to extinction because of:
1. Long life span of 70 years or more, and slow rate of reproduction.
2. Hunting
3. Habitat degradation
4. Fishing related fatalities The correct r e-sponse is:
(a) 1, 2, 3, 4
(b) 1 only
(c) 1, 2, 3
(d) 2, 3, 4

Ans: (a)

Q51. The biodiversity hotspot that compri s-es deserts, savannas, arid woodland and forests, and contains a large number of en-demic plant species is
(a) Cerrado
(b) Caucacus
(c) Tropical Andes

(d) Australia

Ans: (b)

Q52. Forests ecosystems that have suffered a tremendous destruction of habitat co m-prise

(a) Tropical deciduous forests
(b) Temperate forests
(c) Tropical rain forests
(d) Neither of the above

Ans: (c)

Q53. Biodiversity hotspots in India are

1. The Eastern Ghat
2. Eastern Himalayas
3. Andaman and Nicobar islands
4. The Western Ghat

(a) 1, 2
(b) 2, 3
(c) 2, 4
(d) 2, 3, 4

Ans: (c)

Q54. Which of the following animals have a diet mainly consisting of bamboo?

(a) Hares and rabbits
(b) Sloth bears
(c) Red pandas
(d) Golden langurs

Ans: (c)

Q55. Drug discovery leading to the avail a-bility of medicinal resources and further unregulated malpractices in this context result in

1. Degradation of ecosystems
2. Over-exploitation
3. Biodiversity loss
4. Resource destruction with introduction of preda

(a) 1 only
(b) 2, 3
(c) 1, 2, 3, 4
(d) 1, 2, 3

Ans: (d)

Q56. The Red List of Threatened Plants and Animals includes

(a) All extant species
(b) Critically endangered species
(c) Endangered species
(d) Vulnerable species The correct response is
(a) 1, 2, 3
(b) 2, 3, 4
(c) 1, 2, 4
(d) 1, 2, 3, 4

Ans: (b)

Q57. In a mountainous terrain, rich biod i-versity is found in areas located at

(a) Lower latitudes and higher altitudes
(b) Higher latitudes and lower altitudes
(c) Lower latitudes and lower altitudes
(d) Higher latitudes and higher altitudes

Ans: (c)

Q58. Asia's largest inland saltwater lagoon as well as world's largest breeding place for colonies of flamingoes, white-bellied sea e a-gles, jacanas and herons is

(a) Bhittarkanika Wild Life Sanctuary
(b) Ranganathittu Wild Life Sanctuary
(c) Thattekad Bird Sanctuary
(d) Chilka Lake Bird Sanctuary

Ans: (d)

Q59. To which of the following animlas does habitat destruction due to salt activities pose a constant threat?

(a) Indian wild ass
(b) Estuarine crocodile
(c) Dugong
(d) Indian bison

Ans: (a)

Q60. Amphibians are facing unprecedented decline the world over. This has been a t-tributed to

1. Considerable increase in amphibian pred a-tors
2. Loss of habitat
3. Fungal infections
4. Global climate change The correct response is:

(a) 1 only
(b) 1, 2, 4
(c) 1, 3, 4
(d) 2, 3, 4

Ans: (d)

Q61. Which of the following swathes of healthy forests be totally out of bounds for all mining activities and coal excavation to preserve its/their biodiversity biomass and prevent any further loss of endangered sp ecies?
1. National Parks 2. Wildlife Sanc
(a) 1, 2
(b) 2, 3, 4
(c) 1, 2, 3, 4
(d) 3 only

Ans: (c)

Q62. Consider the following statements:
1. Elephants have profound effect on ecosy stems, both positive and negative effects on other species with their foraging activities
2. By pulling down trees to eat leaves and breaking branches, elephants reduce wood
(a) 1, 2
(b) 1, 2, 3
(c) 2, 3, 4
(d) 1, 2, 3, 4

Ans: (b)

Q63. Consider the following statements:
1. Indian ministry of Environment and Forests proposes a 300 crore Cheetah Reproduction Project to translocate this exotic African sp ecies from Namibia to Palpur- Kuna Sanctuary in MP.
2. As per the proposal each ch
(a) 1, 2
(b) 1, 2, 3
(c) 1, 2, 4
(d) 1, 2, 3, 4

Ans: (c)

Q64. Of late a considerable decline in the house sparrows population in Delhi has been observed.
It is presumably due to:
1. Gradual change in architecture like tall glass buildings with no cracks or crevices like old electricity meters for them to nest.
(a) 1, 2
(b) 3, 4
(c) 1, 3, 4
(d) 1, 2, 3, 4

Ans: (d)

Q65. Consider the following statements:
1. Man made forests fires have caused the extinction of several species all over in the past. In India, in the last century, the Indian cheetah, lesser Indian Rhino, the Pink headed Duck, the Forest Owlet and the Hi
(a) 1, 2, 3
(b) 2, 3, 4
(c) 1, 2, 3, 4
(d) 1, 2, 4

Ans: (a)

Q66. Which endangered animal is the source of finest, lightest, warmest and most expensive wool – the Shahtoosh?
(a) Kashmiri goat
(b) Chiru
(c) Cheetal
(d) Serow

Ans: (b)

Q67. The most endangered large cat species in the world is
(a) Asiatic Lion
(b) Indian Tiger
(c) Black Panther
(d) Leopard

Ans: (a)

Q68. Nilgai as an exotic species is found in
(a) South Africa
(b) Ethiopia
(c) Madagascar
(d) Texas in U.S.A

Ans: (d)

Q69. A tiger reserve in the Mhadei Wildlife Sanctuary is located in
(a) Assam
(b) Goa
(c) Orissa
(d) Meghalaya

Ans: (b)

Q70. Which of the following groups of animals in India has the highest number of threatened species?
(a) Birds
(b) Reptiles
(c) Mammals
(d) Fishes

Ans: (c)

Q71. One of the following birds, often found in wetlands/ marshes, have a symbiotic relationship with cows in the field and, where ever cows graze, they are seen around them pecking for ticks from their bodies and ears. These birds are:
(a) Darters
(b) White Egrets
(c) Jacanas
(d) Eagles

Ans: (b)

Q72. Dachigam National Park in Srinagar boasts of housing some of the rarest species in the world, the most eminent of them being:
(a) Asiatic Black Bear
(b) Himalayan Weasel
(c) Kashmir Stag (Hongal)
(d) Long-tailed Marmot

Ans: (c)

Q73. Consider the following statements:
1. Biodiversity provides critical support for drug discovery and the availability of medical resources
2. At least 50% of pharmaceutical compounds are derived from plants, animals and micro - organism
3. 100% of the w
(a) 1, 2
(b) 1, 3, 4
(c) 1, 2, 3, 4
(d) 1, 2, 3

Ans: (b)

Q74. Which of the following amphibians are considered barometers of biodiversity in the Western Ghats in India?
1. Frogs 2. Salamanders 3. Toads 4. Uraeotyphlus The correct response is:
(a) 1, 3
(b) 1, 2, 3, 4
(c) 1, 2, 3
(d) 1, 3, 4

Ans: (b)

Q75. The hotspot that is home to unusually high number of endemic plants and animal species, and is one of the most biological rich regions on Earth, is:
(a) Tropical Andes
(b) Succulent Karoo
(c) Atlantic Forest
(d) Caucasus

Ans: (d)

Q76. Which of the following National Parks in India is the only floating park in the world?
(a) Pin Valley National Park in Himachal Pradesh.
(b) Phawngpui Blue Mountain National Park in Mizoram.
(c) Nokrek National Park in Meghalaya
(d) KeibulLamjao National Park in Manipur

Ans: (d)

Q77. Where is Cold Desert Biosphere Reserve located in India?
(a) Uttarakhand
(b) Himachal Pradesh
(c) Ladakh in Jammu & Kashmir
(d) Sikkim

Ans: (b)

Q78. Which Wildlife Conservation Organisation has been focusing on the protection of Biodiversity hotspots in India?
(a) Wildlife Conservation Society
(b) Natural Resources Defense Council
(c) World Wildlife Fund
(d) Conservation International

Ans: (d)

Q79. Consider the following statements:
1. World Wildlife Day is observed each year on March 3

2. U.N Secretary General Ban Ki -moon in his message on the first anniversary of world wild-life day on March 3, 2013, said - "Let's go wild for Wildlife"
3. U.N Secretary General Ban Ki -moon in his message on Wildlife Day on March 3, 2015 said- "It is time to get serious about wildlife crime" Which of the above statements are co r-rect?
(a) 1 only
(b) 1, 2
(c) 1, 3
(d) 2, 3

Ans: (c)

Q80. Which of the following national parks in India is an important bird area as a t-tributed by Birdlife International?
(a) Mathikettan Shola National Park in Kerala
(b) Mount Harriet National Park in Andaman and Nicobar Islands
(c) Jim Corbett National Park in Uttarakhand
(d) Keoladeo National Park in Ghana

Ans: (b

Q1. Coal is regarded as the worst enviro n-mental pollutant because when burnt it r e-leases large amounts of
1. Carbon dioxide 2. Sulphur dioxide
3. Nitrogen oxides 4. Methane Select the co r-rect answer.
(a) 1 and 4
(b) 1, 2 and 3
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: (b)

Q2. Substances that poison the nervous sy s-tem are called
(a) Nucleosides
(b) Nucleotides
(c) Neurotoxins
(d) Nervotins

Ans: (c)

Q3. Which of the following statements is/are true for greenhouse gases?
1. Greenhouse gases are green in colour.
2. Greenhouse gases are responsible for global warming.
Select the correct answer using the codes given below.
(a) 1
(b) 3
(c) 1 and 3
(d) 2 and 3

Ans: (d)

Q4. The nausea and stupor of drunkenness (from consumption of ethyl alcohol) are not caused by alcohol itself but by
(a) Acetaldehyde
(b) Acetic acid
(c) Methyl alcohol
(d) Hydrochloric acid

Ans: (a)

Q5. Smokers suffer chronically from the effects of
(a) Carbon dioxide
(b) Nitrogen dioxide
(c) Carbon monoxide
(d) Sulphur dioxide

Ans: (c)

Q6. Which of the following are corrosive poisons?
1. Sulphuric acid 2. Phosgene
3. Sodium hydroxide 4. Ozone Select the co r-rect answer using the codes given below.
(a) 1 and 3
(b) 1, 2, 3 and 4
(c) 1, 2 and 4
(d) 2 and 4

Ans: (b)

Q7. Mutagens are chemicals that affect the
(a) Sense of judgement
(b) Enzyme action
(c) Nerves
(d) Hereditary pattern

Ans: (d)

Q8. Carcinogenesis can be caused by
3. Benzene 4. Soot and tar Select the correct answer using the codes given below.
(a) 1, 2, 3 and 4

(b) 1 and 4
(c) 3 and 4
(d) 1 and 2

Ans: (a)

Q9. Match List I (Type of Toxin) with List II (Example) and select the correct answer using the code given below the lists:
List I List II
(Type of Toxin) (Example)
A. Carcinogen 1. Cyanide ion
B. Neurotoxin 2. LSD
C. Hallucinogen 3. Benzo (a) pyrene
D. M
(a) 4 3 2 1
(b) 3 4 2 1
(c) 4 1 3 2
(d) 2 4 3 1

Ans: (b)

Q10. Which one of the following is not a metabolic poison?
(a) Nicotine
(b) Cyanide ion
(c) Arsenic
(d) Carbon monoxide

Ans: (a)

Q11. The toxins,which cross the placenta and harm the fetus, are called
(a) Mutagens
(b) Carcinogens
(c) Teratogens
(d) Hallucinogens

Ans: (c)

Q12. Which of the following statements about natural gas are true?
1. Natural gas is the cleanest fossil fuel.
2. Saudi Arabia has the highest natural gas r e-serves.
3. Methane is the major component of natural gas.
4. Natural gas is a product of tiny plan
(a) 1 and 4
(b) 2 and 3
(c) 1, 2 and 3
(d) 1, 3 and 4

Ans: (d)

Q13. The hallucinogenic chemical commo n-ly known as 'Hash' is
(a) LSD
(b) Marihuana
(c) Mescaline
(d) Methaqualone

Ans: (b)

Q14. Excessive emissions of carbon dioxide are responsible for ocean acidification. It means that
1. Oceanic waters become acidic.
2. Only the surface waters become acidic.
3. The surface waters only become less alk a-line.
Select the correct answer from th
(a) 3 only
(b) 2 only
(c) 2 and 3
(d) 1 only

Ans: (a)

Q15. The most polluted industrial cluster in India is in
(a) Faridabad
(b) Ankleshwar
(c) Surat
(d) Durgapur

Ans: (b)

Q16. Some of the organic compounds have been found to be highly toxic to human health and are banned. They are known as persistent organic pollutants. This means that
1. These compounds cannot be broken down by plants or animals.
2. Being water-soluble, t
(a) 1 and 4
(b) 2 and 3
(c) 1, 3 and 4
(d) only 2

Ans: (c)

Q17. Which country is the largest producer of heavy water that is used innuclear rea c-tors to slow down the speed of neutrons?
(a) India

(b) Germany
(c) Japan
(d) France

Ans: (a)

Q18. Which of the following statement/s is/are true?
1. A majority of nuclear power plants in the world have light-water reactors.
2. Unlike light -water reactors, the heavy water reactors require enriched uranium (U-235).
3. Light-water is lighter than or
(a) 1 and 4
(b) 2 and 4
(c) 2 and 3
(d) only 1

Ans: (d)

Q19. The Chernobyl accident is regarded as the worst nuclear disaster in history. The moderator that slows down the speed of neutrons, used in this plant was
(a) Heavy water
(b) Light water
(c) Mica
(d) Solid graphite

Ans: (d)

Q20. A study by The Energy and Resources Institute (TERI) has found very high levels of ozone in Delhi, which is a cause of co n-cern because
(a) it is indicative of the depletion of ozone layer.
(b) it indicates that atmospheric oxygen (O2) is being converted into ozone (O3).
(c) it shows that there are high level s of poll u-tants like nitrogen oxides that react with h y-drocarbons, in the presence of sunlight to pr o-duce ozone.
(d) it shows that there are high levels of poll u-tants in the atmosphere, such as carbon mo n-oxide and carbon dioxide that react with h y-drocarbons in the presence of sunlight to pr o-duce ozone.

Ans: (c)

Q21. LSD stands for
(a) Low sugar drugs
(b) Lysergic acid diethylamide
(c) Lithium sodium diodes
(d) Low sodium dish

Ans: (b)

Q22. Crude oil is sometimes labelled as sour because
(a) it is more acidic.
(b) it is more alkaline.
(c) it has higher amounts of sulphur.
(d) it has lower levels of sulphur.

Ans: (c)

Q23. Tetraethyl lead (TTL) was used as an additive to
(a) Gasoline
(b) Food colourings
(c) Insecticides
(d) Fertilizers

Ans: (a)

Q24. Which one of the following is a toxic pollutant?
(a) Renin
(b) Dioxin
(c) Pepsin
(d) Chymotrypsin

Ans: (b)

Q25. One of the most frequently detected volatile organic compounds, which was used as an air -cleaning gas additive and is now banned, is
(a) Glycol ether
(b) Methyl Tertiary Butyl Ether
(c) Ethyl methyl ether
(d) Diethyl ether

Ans: (b)

Q26. Which toxic metal enters the water flowing out of taps due to corrosion of plumbing materials and can lead to learning disabilities in children?
(a) Copper
(b) Lead
(c) Aluminium
(d) Tin

Ans: (b)

Q27. Which of the following are toxic air pollutants?
1. Asbestos 2. Arsenic
3. Benzene 4. Betadine Select the correct a n-swer.
(a) 2 and 4
(b) 2 and 3
(c) 1, 3 and 4
(d) 1, 2 and 3

Ans: (d)

Q28. The harmful ozone in the lower a t-mosphere, which is a major part of smog, is formed when
(a) nitrogen oxides and volatile organic co m-pounds mix in sunlight.
(b) it rains in the presence of sulphur dioxide.
(c) it rains in the presence of nitrogen dioxide.
(d) particulate matter in the atmosphere d e-composes.

Ans: (a)

Q29. Major soil pollutants are
1. Radioactive waste 2. Pesticides
3. Nitrates 4. Dioxins Select the correct a n-swer.
(a) 1 and 4
(b) 2 and 3
(c) All of the above
(d) None of the above

Ans: (c)

Q30. Asbestos causes
(a) Liver damage
(b) Kidney stones
(c) Lung cancer
(d) Jaundice

Ans: (c)

Q31. Which of the following statement/s about chlorofluorocarbons (CFCs) is/are true?
1. They can destroy ozone in the stratosphere.
2. They work well as coolants.
3. They are malleable and ductile.
4. They are present in fire extinguishers.
Select the co
(a) 1, 2 and 4
(b) 1 and 2
(c) 1, 2 and 3
(d) only 3

Ans: (a)

Q32. The contaminant not present in lea k-ing gasoline is
(a) Benzene
(b) Ethanol
(c) Toluene
(d) Methyl Tertiary Butyl Ether

Ans: (b)

Q33. The Agency for Toxic Substances and Disease Registry (ATSDR) is based in
(a) Brazil
(b) New York
(c) London
(d) Atlanta

Ans: (d)

Q34. EPA or sometimes USEPA (The Uni t-ed States Environmental Protection Agency) has its headquarters in
(a) Toronto
(b) Oxford
(c) Washington, D.C.
(d) Berlin

Ans: (c)

Q35. The pollutant ranked at the first pos i-tion in the ATSDR 2015 Substance Priority List (SPL) is
(a) Arsenic
(b) Cadmium
(c) Chlordane
(d) Nickel

Ans: (a)

Q36. Which one of the following food add i-tives is safe to use?
(a) Aspartame
(b) Monosodium glutamate
(c) Sodium chloride
(d) Sodium nitrate

Ans: (c)

Q37. Which one of the following statements is not true for monosodium glutamate (MSG)?
(a) MSG is a highly refined trans fat.
(b) MSG is used as a flavor enhancer in soups.
(c) MSG is found in Chinese food.
(d) Regular consumption of MSG may result in depression and disorientation.

Ans: (a)

Q38. Which of the following statements about trans fats are true?
1. They extend the shelf life of food products.
2. They increase LDL (bad) cholesterol levels.
3. They decrease HDL (good) cholesterol.
4. They are found in boiled vegetables.
Select the co
(a) 1, 2 and 4
(b) 1, 2 and 3
(c) 2 and 3
(d) only 4

Ans: (b)

Q39. Consider the following statements:
1. Butylated hydroxytoluene (BHT) is a pr e-servative, which prevents foods from changing colour or flavour.
2. High fructose corn syrup (HFCS) is a highly refined artificial sweetener.
3. Butylated hydroxyanisole (BH
(a) 1 and 2
(b) 1 and 3
(c) only 3
(d) only 4

Ans: (c)

Q40. According to the Ambient Air Poll u-tion (AAP) report for the year 2014, which city had PM 2.5 pollution levels (highest in the world)?
(a) Mumbai
(b) Delhi
(c) Beijing
(d) Bangkok

Ans: (b)

Q41. Which toxic components were found, in excess of the permissible limit, in 2 - minute 'Maggi' noodles (Nestle India's flag-ship brand) in May, 2015?
(a) Monosodium glutamate and lead
(b) Monosodium glutamate and mercury
(c) Potassium bromate and potassium bromide
(d) Potassium bromate and sodium nitrate

Ans: (a)

Q42. Which of the following toxic chemicals were found in 84 per cent of bread and bak-ery samples collected from across Delhi in May 2016?
1. Potassium bromide 2. Potassium bromate
3. Potassium iodide 4. Potassium iodate Select the correct answer from tho
(a) 1 and 2
(b) 3 and 4
(c) 1 and 3
(d) 2 and 4

Ans: (d)

Q43. Which of the following solvents is used in refrigeration and is a known culprit of ozone layer depletion:
(a) Benzene
(b) Chlorofluorocarbon
(c) Carbon tetrachloride
(d) Chloroform

Ans: (b)

Q44. Super critical fluids used in Green Chemistry are a cross between
(a) A liquid and a gas
(b) A solid and a gas
(c) A liquid and a liquid
(d) A gas and a gas

Ans: (a)

Q45. Immobilized solvents used in Green Chemistry are solvents which are
(a) Frozen
(b) Bound to a polymer
(c) Volatile
(d) Super critical

Ans: (b)

Q46. Hazardous effects of a substance can be reduced by
1. increasing its bioavailability

2. minimizing its bioavailability
3. using protecting groups
4. using solvents Select the correct answer u s-ing the codes given below.
(a) 1 only
(b) 2 only
(c) 1 and 4 only
(d) 2 and 3 only

Ans: (b)

Q47. Detection, measurement and monito r-ing of chemicals in the environment is done through
(a) Analytical Chemistry
(b) Medicinal Chemistry
(c) Combinatorial Chemistry
(d) Prebiotic Chemistry

Ans: (a)

Q48. Polysaccharide polymers are better than most other polymers because
1. Their accident potential is negligible.
2. They are biodegradable after their useful life is over.
3. They are obtained from non-renewable feed-stocks.
4. They have no significant
(a) 1, 2
(b) 2, 4
(c) 1, 2, 4
(d) 1, 2, 3

Ans: (c)

Q49. Production of chemicals from waste biomass
1. Leads to conservation of non -renewable re-sources.
2. Facilitates global warming.
3. Contributes to soil pollution.
4. Reduces air pollution.
Which of the above statements are not true?
(a) 1, 4
(b) 2, 3
(c) 1, 2, 3
(d) 1, 3, 4

Ans: (b)

Q50. Spinosad is a reduced risk insecticide which
(a) Does not bioaccumulate
(b) Volatilizes
(c) Persists in the environment
(d) Is highly toxic to humans

Ans: (a)

Q51. Synthesis of many different substances simultaneously at a fast rate can be done by means of
(a) Physical Chemistry
(b) Green Chemistry
(c) Combinatorial Chemistry
(d) Environmental Chemistry

Ans: (c)

Q52. Enzymes are used to
1. Improve the performance of detergents
2. Make beer
3. Process food
4. Digest food Which of the above are true?
(a) 4
(b) 1, 4
(c) 1, 3, 4
(d) 1, 2, 3, 4

Ans: (d)

Q53. Biocatalysts are highly selective. This selectivity leads to
(a) More side reactions
(b) Lower yields
(c) Purer products
(d) More environmental waste

Ans: (c)

Q54. The biomaterial used to replace large sections of bones is
(a) Titanium
(b) Alumina
(c) Polyurethane
(d) 316L stainless steel

Ans: (b)

Q55. Which of the following is not true?
(a) Silicones are used in cosmetic surgery.
(b) Carbon is used in heart valves.
(c) Polyurethanes are used for pace maker leads.
(d) Arsenic is used to fill bone voids.

Ans: (d)

Q56. Which of the following is not an exa m-ple of Biomimetics:
(a) Birds inspiring aircraft design
(b) Seashells inspiring ceramics
(c) Butterflies inspiring making of artificial silk
(d) Lizards inspiring 'Gecko tape'

Ans: (c)

Q57. Replacing polyethylene used in coated papers by a biopolymer can help
(a) Eliminate oxygen in compost
(b) Eliminate plastic scraps in compost
(c) Eliminate carbon dioxide in compost
(d) Eliminate water in compost

Ans: (b)

Q58. Metal ions which act as enzyme inhib i-tors are
(a) Hg2+, Cd2+, Pb2+
(b) Ca2+, Sr2+, Ba2+
(c) Na+, K+, Ca2+
(d) Mg2+, Fe2+, Cu2+

Ans: (a)

Q59. The outbreak of itai itai disease in J a-pan occurred due to
(a) Mercury poisoning
(b) Lead poisoning
(c) Cadmium poisoning
(d) Arsenic poisoning

Ans: (c)

Q60. Genetic defects were observed in b a-bies whose mothers had consumed mercury contaminated fish from Minamata Bay (Ja-pan) in 1953. This mercury was in the form of
(a) Mercuric chloride
(b) Methyl mercury
(c) Mercuric sulphide
(d) Isopropryl mercury

Ans: (b)

Q61. Carbon monoxide poisoning can be cured by
(a) Exposing the affected person to fresh ox y-gen
(b) Eating butter
(c) Drinking lemon-water
(d) Consuming multivitamin tablet

Ans: (a)

Q62. Chronic exposure of plants to sulphur dioxide leads to chlorosis, which is
1. blackening of buds
2. burning of roots
3. bleaching of green leaves
4. retarded growth Select the correct answer using the codes given below.
(a) 1 and 2 only
(b) 4 only
(c) 3 only
(d) 1, 2 and 3 only

Ans: (c)

Q63. The biochemical effects of ozone and PAN appear mostly to arise from the gene r-ation of
(a) Carbocations
(b) Free radicals
(c) Carbanions
(d) Carbenes

Ans: (b)

Q64. Cyanide exerts its toxic action by i n-hibiting the production of
(a) ATP
(b) Oxygen
(c) Haemoglobin
(d) Bile acids

Ans: (a)

Q65. The pesticide, DDT
1. Attacks the central nervous system.
2. Accumulates in the fatty membrane su r-rounding nerve cells.
3. Persists in the environment.
4. Contains chlorine Which of the above statements are true?
(a) 1, 2, 3, 4
(b) 1, 2, 3
(c) 1, 4
(d) 1, 3, 4

Ans: (a)

Q66. Carcinogens to which workers should not be exposed:
1. Vinyl chloride 2. Ethylene dichloride
3. Beta-naphthylamine 4. Aspirin Which of the above is false?
(a) 2
(b) 4
(c) All of the above
(d) 1, 2, 3

Ans: (b)

Q67. The air pollutants obtained by co m-bustion are
1. carbon dioxide 2. Nitrogen dioxide
3. Ammonia 4. Sulphur dioxide Select the correct answer using the codes given below.
(a) 1 and 2 only
(b) 3 and 4 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (c)

Q68. Forest fires are natural sources of
(a) Carbon monoxide
(b) Hydrocarbons
(c) Hydrogen sulphide
(d) Nitrogen dioxide

Ans: (a)

Q69. Smog containing high levels of sulphur dioxide is called
(a) Photochemical smog
(b) Reducing smog
(c) Oxidising smog
(d) Acidic smog

Ans: (b)

Q70. The gas accidentally released by Union Carbide pesticide plant (Bhopal gas trag e-dy) in 1984 was
(a) Carbon monoxide
(b) Sulphur dioxide
(c) Methyl isocyanate
(d) Methane

Ans: (c)

Q71. The primary releases of radioactive nuclides in the Fukushima Daiichi (Japan) nuclear disaster were those of
(a) Iodine - 131 & Calcium
(b) Caesium - 137 & Barium
(c) Iodine - 131 & Chlorine
(d) Iodine - 131 & Caesium - 137

Ans: (d)

Q72. The most polluted places in India are
(a) Gwalior and Bhopal
(b) Vapi and Sukinda
(c) Jharkhand and Nasik
(d) Surat and Rampur

Ans: (b)

Q73. The Trade Pact with US and France will help India fight global warming with
(a) Heat energy
(b) Microwave energy
(c) Nuclear energy
(d) Electrical energy

Ans: (c)

Q74. An agreement was made between India and the World Bank to advance India's green growth agenda (biodiversity conservation and pollution control) in the year
(a) 2006
(b) 2008
(c) 2009
(d) 2010

Ans: (d)

Q75. India launched a Green court, to make polluters pay damages, in the year
(a) 2010
(b) 2007
(c) 2008
(d) 2005

Ans: (a)

Q76. Uranium interacts with elements from around the periodic table to potentially help improve the selective extraction of spent uranium in nuclear waste clean -up. This work of separating, recycling and reducing nuclear waste has been done by chemists at
(a) Rutgers University
(b) University of California
(c) University of Nottingham
(d) Brown University

Ans: (c)

Q77. Biofuels have proven to be an effective, renewable, *alternative to gasoline and di e-sel, but jet fuels pose unique challenges. These challenges have now been met with a new technique developed by researchers at the Energy Biosciences Institute (EBI),
(a) Sugarcane biomass
(b) Paper pulp
(c) Animal waste
(d) Wood

Ans: (a)

Q78. The amount of ozone created from air-craft pollution is highest from flights leaving and entering
1. Italy 2. Brazil
3. Australia 4. New Zealand The correct a n-swer is
(a) 1 only
(b) 2 only
(c) 1 and 2
(d) 3 and 4

Ans: (d)

Q79. A team of researchers led by Boston College chemist, Dunwei Wang achieved 'unassisted' water splitting using an abu n-dant rust-like mineral and silicon to capture and store solar energy within hydrogen gas. This mineral is
(a) Bauxite
(b) Haematite
(c) Malachite
(d) Dolomite

Ans: (b)

Q80. An organic solar cell consisting of a single component has been produced on the basis of metal -organic framework com-pounds (MOFs). The material is highly
1. Ductile 2. Malleable
3. Elastic 4. Fluorescent The correct answer is
(a) 1 and 2
(b) 2 and 4
(c) 3 only
(d) 4 only

Ans: (c)

Q81. When were samples of white, brown, multigrain, whole wheat breads, buns and pizza breads in Delhi found to contain p o-tassium bromate and potassium iodate?
(a) May 2015
(b) November 2014
(c) May 2016
(d) February 2016

Ans: (c)

Q82. When were sales of Maggi noodles banned nationwide for an indefinite period by the Central Government of India?
(a) May 2015
(b) June 2015
(c) January 2016
(d) May 2016

Ans: (b)

Q83. When were Maggi noodles re-launched in India?
(a) August 2015
(b) November 2015
(c) December 2015
(d) April 2016

Ans: (b)

Q84. The Secretariat of the Convention on Biological Diversity, coordinating the Inte r-national Year of Biodiversity campaign, was based in
(a) Stockholm
(b) Vienna
(c) Montreal
(d) Rotterdam

Ans: (c)

Q85. The year declared as the International Year of Biodiversity was
(a) 2009
(b) 2010
(c) 2006
(d) 2008

Ans: (b)

Q86. Which one of the following is a rene w-able energy resource?
(a) Natural gas

(b) Coal
(c) Syngas
(d) Petroleum

Ans: (c)

Q87. Which place in the world has the hig h-est natural gas reserves?
(a) Iran
(b) Saudi Arabia
(c) Russia
(d) UAE

Ans: (c)

Q88. Which one of the following is the greenest city in India?
(a) Chandigarh
(b) Bhopal
(c) Patna
(d) Pune

Ans: (a)

Q89. The Indian city, which has the largest number of roof-top solar water heaters is
(a) Jaipur
(b) Agra
(c) Bangalore
(d) Ahmedabad

Ans: (c)

Q90. The largest solar power producer in the world is
(a) Burma
(b) India
(c) Iran
(d) Germany

Ans: (d)

Q91. The World Geothermal Congress (2010), organized by the International Ge o-thermal Association, was held in
(a) New Zealand
(b) Sweden
(c) Indonesia
(d) China

Ans: (c)

Q92 Which one of the following Indian states is a leading harvester of wind energy?
(a) Tamil Nadu
(b) Punjab
(c) Haryana
(d) Madhya Prades

Ans: (a)

Q93. Stockholm Convention is an intern a-tional treaty concerned with
(a) Depletion of ozone layer
(b) Elimination and restriction of the produ c-tion and use of persistent organic pollutants
(c) Climate change aimed at fighting global warming
(d) Conservation of biodiversity

Ans: (b)

Q94. Which one of the following statements about Compressed Natural Gas (CNG) is not true?
(a) It is environmentally much cleaner than the other fossil fuels.
(b) It is obtained during refining of crude oil.
(c) It comprises primarily methane.
(d) Unlike LPG, it is not liquefied.

Ans: (b)

Q95. Exposure to which toxic metal, during lactation, causes learning and memory - impairment?
(a) Zinc
(b) Chromium
(c) Arsenic
(d) Cadmium

Ans: (d)

Q96. Nor cantharidin (NCTD), currently used in the treatment of several cancers such as leukemia, melanoma and hepatoma, has been found to induce
(a) DNA damage
(b) Convulsions
(c) Respiratory disorders
(d) Sneezing

Ans: (a)

Q97. Which mouth rinse has been recently found to have lower cell-toxic effect against fibroblasts and epithelial cells?
(a) Listerine
(b) Octenidine

(c) Chlorhexidine
(d) Meridol

Ans: (b)

Q98. Flurbiprofen is non -steroidal drug, commonly used for its
1. Analgesic effect
2. Antipyretic effect
3. Anti-inflammatory effect
4. Antihypnotic effect Choose the correct a nswer.
(a) 1 and 2
(b) 2 and 3
(c) 1 and 4
(d) 1, 2 and 3

Ans: (d)

Q99. On May 22, 2016, a gang drilled hole on a pipeline of Indian Oil Corporation Limited (IOCL) and placed a valve to e xtract fuel. This oil pilferage happened
(a) in Manipur
(b) on Kaudia riverbed of Paradip
(c) in Surat
(d) on Beas riverbed of Manali

Ans: (b)

Q100. According to United Nations Env ironment Program
(Unep) report (May 2016),
(a) CNG is environmentally much cleaner than other fossil fuels.
(b) Hippocampus and cerebellum, which d evelop postnatally, are affected by lead exp osure.
(c) Women and children are most affected by environmental pollution.
(d) There is a possibility of cognitive impai rment in adulthood if there is cadmium exp osure during lactation.

Ans: (c)

Q101. Consider the following:
1. Carbon dioxide 2. Oxides of Nitrogen
3. Oxides of Sulphur Which of the above is/are the emission/emissions from coal combustion at thermal power plants?
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q102. Regarding "carbon credits", which one of the following statements is not co rrect?
(a) The carbon credit system was ratified in conjunction with the Kyoto Protocol.
(b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota.
(c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission.
(d) Carbon credits are traded at a price fixed from time to time by the United Nations Env ironment Programme.

Ans: (d)

Q103. What is "oilzapper"?
(a) It is an eco -friendly technology for the r emediation of oily sludge and oil spills.
(b) It is the latest technology developed for under-sea oil exploration.
(c) It is a genetically engineered high biofuel -yielding maize variety.
(d) It is the latest technology to control the a ccidentally caused flames from oil wells.

Ans: (a)

Q104. Human activities in the recent past have caused the increased concentration of carbon dioxide in the atmosphere, but a lot of it does not remain in the lower atmosphere because of
1. its escape into the outer stratosphere.
2. the photosynthesis by p
(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (c)

Q105. The increasing amount of carbon d ioxide in the air is slowly raising the tempe rature of the atmosphere, because it absorbs
(a) the water vapour of the air and retains its heat
(b) the UV part of the solar radiation

(c) all the solar radiations
(d) the infrared part of the solar radiation

Ans: (d)

Q106. Which one of the following food additives is safe to use?
(a) Sodium chloride
(b) Monosodium glutamate
(c) Potassium bromate
(d) Aspartame

Ans: (a)

Q107. Which of the following are toxic air pollutants?
1. Arsenic 2. Asbestos
3. Benzene 4. Potassium chloride Select the correct answer.
(a) 2 and 4
(b) 2 and 3
(c) 1, 2 and 3
(d) 1, 2, 3 and 4

Ans: (c)

Q108. Which one of the following is a metabolic poison?
(a) Nicotine
(b) Betadine
(c) Arsenic
(d) Sodium phosphate

Ans: (c)

Q109. Which of the following toxic chemicals were found in bread samples collected from across Delhi in May 2016?
1. Potassium iodide 2. Potassium bromide
3. Potassium bromate 4. Potassium iodate Select the correct answer from those given below:
(a) 1 and 2
(b) 2 and 3
(c) 3 and 4
(d) 2 and 4

Ans: (c)

Q110. Which toxic components were found in 'Maggi' noodles in May, 2015?
(a Potassium bromate and potassium iodate
(b) Monosodium glutamate and lead
(c) Potassium bromate and potassium bromide
(d) Monosodium glutamate and mercury

Ans: (b)

Q111. The soy air filter d
(a) 4 only
(b) 1 and 3
(c) 2 and 3
(d) 1 and 4

Ans: (c)

Q112. Molecular biologists at University of California have discovered that a bacterium can convert carbon dioxide to carbon monoxide. This will help combat which challenges?
1. Global warming 2. Energy shortage
3. Water purification 4. Removal of nuclear
(a) 1 and 2
(b) 1 and 4
(c) 2 and 3
(d) 1 only

Ans: (a)

Q113. Researchers at which university have described the use of uranium nitride compounds which could help with nuclear waste recycling technologies?
(a) Washington State University
(b) Manchester University
(c) University of California
(d) Brown University

Ans: (b)

Q114. Scientists at The Hebrew University of Jerusalem have found that the 'defective' structure on the edges of tiny chemical catalysts enhances their reactivity and effectiveness. This can be used to design improved catalysts that make industrial chemic
(a) 2 and 3
(b) 1 and 4
(c) 2 and 4
(d) 1 and 3

Ans: (d)

Q115. The Washington State University and Chinese team have developed a new kind of

air filtering material that uses natural soy protein and bacterial cellulose. Which of the following statements are true for this filte r-ing material?
1. These materials ar
(a) 2 and 3
(b) 1 and 4
(c) 1, 2 and 4
(d) 1, 2 and 3)

Ans: (c)

Q1. Consider the following statements:
1. Deep ice cores are studied to look into the climate changes in the past.
2. Ice layers of the Arctic region are especially rich in fossils that help construct the past cl i-mates.
Which of the above statement/statem
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q2. What is the study of the rings in the trees to estimate the life span and the cl i-matic conditions prevailing in the past, called?
(a) Ring analysis
(b) Varve analysis
(c) Paleaoclimatology
(d) Dendrochronology

Ans: (d)

Q3. Consider the following statements:
1. The heavier oxygen isotope is deposited in larger amounts in the polar ice caps during colder phases of climate.
2. Oxygen 16 is the heavier isotope of oxygen found in polar ice caps.
Which of the above statement/
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q4. Consider the following statements:
1. Ice cores from polar areas provide an indica-tion of past climates through oxygen isotop analysis.
2. Coral reefs are another source of similar information.
Which of the above statement/statements is/are true?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q5. Consider the following statements:
1. Fossils found in sediments provide proxy evidence about ancient climates and climate changes.
2. They are especially suitable sources of i n-formation for periods before Cambrian Era.
Which of the above statement/st
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q6. What is indicated by a greater distance between successive rings of a tree?
(a) a colder climate
(b) a wetter climate
(c) advancing glaciers
(d) a drier climate

Ans: 6

Q7. What is the impact of advancing glac i-ers on the rings of the trees?
(a) they become concentric
(b) their shape is distorted
(c) they become more widely spaced
(d) they are immune to this change

Ans: (b)

Q8. Consider the following statements:
1. Dendrochronological evidence suggests that climate of western United States was relatively warmer during 3500 to 1300 B.C.
2. The climate became colder after 300 A.D. and it led to glacial advances in this region.
(a) 1 only

(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q9. What are varves?
(a) Annual change in temperature from su m-mer to winter.
(b) Annual layers of sediment in lakes exper i-encing annual freezing and thawing.
(c) Layers of sediment contained in deep ice cores of Arctic region.
(d) Sequence of fossils in a chronological o r-der. countries (Nicaragua and Syria) have not signed the Paris Agreement.

Ans: (b)

Q10. Consider the following statements:
1. Varve analysis is based on the principle of deposition of only fine grained silt during the frozen phase of a water body.
2. The tree rings corresponding to a period of fine silt in varves will be closely spaced.
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q11. Consider the following statements:
1. Peat bogs are an important means of clima t-ic dating.
2. Analysis of pollen grains in peat bogs and other deposits shows the geographical extent of plant species in the past.
Which of the above statement/statement
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q12. Consider the following statements:
1. Analysis of fossil and other evidence su g-gests that the climate during the Cambrian, Ordovician, Silurian periods was warmer and generally ice free.
2. The Carboniferous and early Permian period witnessed another
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q13. Consider the following statements:
1. The last ice age reached its maximum about 18000 years ago.
2. Rapid melting of ice in Holocene period after the last ice age raised the sea level by about 100 metres.
Which of the above statement/statements is/a
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q14. Consider the following statements:
1. Climate of Europe became relatively drier and warmer in the 10th and 11th centuries A.D.
2. Production of wine in England increased due to this warming of climate.
Which of the above statement/statements is/are t
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: 14

Q15. Vikings abandoned Greenland in the beginning of the 15th century when the cl i-mate started becoming colder and harsher. During which century had they settled there?
(a) 8th
(b) 10th
(c) 12th
(d) 9th

Ans: (b)

Q16. When were reliable thermometers and barometers developed for precise measur e-ments of weather elements?
(a) 16th century
(b) 17th century

(c) 18th century
(d) 19th century

Ans: (b)

Q17. When was a global network of daily temperature records created?
(a) around 1800
(b) around 1850
(c) around 1890
(d) around 1920

Ans: (b)

Q18. Consider the following statements:
1. World Meteorological Organisation has re c-ommended establishment of reference meteo r-ological stations for comparability of data over time.
2. Such stations are recommended to be esta b-lished at sea level to neutral
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q19. Consider the following statements:
1. A warming trend in temperature was o b-served during early 20th century that peaked around 1940.
2. A somewhat lowering of temperatures was observed after 1940 which is attributed to global dimming.
Which of the ab
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q20. During the recent phase of global te m-perature increase the northern hemisphere experienced a higher rise in temperature than the southern hemisphere. It was a r e-sult of
(a) greater extent of landmass in northern he m-isphere than in southern.
(b) greater emission of greenhouse gases in the northern hemisphere than in the southern.
(c) the cooling effect of the ozone hole in the southern hemisphere.
(d) more of volcanic eruptio ns in the northern hemisphere.

Ans: (a)

Q21. Consider the following statements:
1. Sir George Simps on argued that an increase in insolation would strengthen the meridional transfer of air thereby increasing precipitation in polar areas.
2. It would also mean a higher moisture co n-tent of atmosp
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q22. Consider the following statements:
1. Amount of insolation due to sunspot cycle varies from year to year.
2. The periodicity of sun spot cycle has been found varying from 9 to 16 years.
Which of the above statement/statements is/are true?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: 22

Q23. Consider the following statements:
1. A stronger geomagnetic field deflects the charged protons emitted by solar flares t o-wards the poles.
2. When the geomagnetic field is weaker, it is likely to aggravate the ozone hole in the polar areas.
Which of
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2 Which of the above stat e-ment/statements is/are true?

Ans: (a)

Q24. The angle of inclination of the earth varies b

(a) About 21,000 years
(b) About 25,000 years
(c) About 36,000 years
(d) About 41,000 years

Ans: (d)

Q25. Consider the following statements:
1. There is a variation of about 3 per cent in the distance between the earth and the sun b e-tween aphelion and perihelion.
2. This variation in distance causes a diffe r-ence of 9 per cent in the amount of insolation
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q26. What is meant by the eccentricity of the orbit of the earth?
(a) Change in the distance between the earth and the sun due to the elliptical shape of the orbit of the earth.
(b) Reversal of the dates of aphelion and per i-helion.
(c) Changes in the angle of incidence of the earth's axis.
(d) Change in the shape of the orbit of the earth.

Ans: (d)

Q27. Consider the following as possible r e-sult of reversal of the dates of aphelion and perihelion:
1. Summer of northern hemisphere will be warmer.
2. Winter of northern hemisphere will be coo l-er.
3. Summer of southern hemisphere will get cooler.
4. Wint
(a) 1, 2 and 3
(b) 2, 3 and 4
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: (d)

Q28. Consider the following factors:
1. Climatic changes due to astronomical fa c-tors like changes in the orbit of the earth or the solar activity are secular changes.
2. Climatic changes caused by factors like vo l-canic activity are also always secular.
Wh
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q29. Year 1816 was considered a year with no winter in Europe and North America. It was a result of
(a) atmospheric pollution due to extensive fo r-est fires in California region.
(b) the reduced solar activity under the sun spot cycle.
(c) atmospheric pollution due to volcanic eru p-tions in Indonesia in 1815.
(d) atmospheric pollution due to volcanic eru p-tions in Iceland in 1815.

Ans: (c)

Q30. Consider the following statements:
1. Increased amount of carbon dioxide in air is an important cause of increasing temperature of the earth.
2. Smoke from forest fires and industries adds soot to the air enhancing the warming.
2. The per capita emis
(a) 1, 2 and 4
(b) 2, 3 and 4
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: 30

Q

Ans: (b)

Q32. Consider the following statements:
1. There has been a greater increase in the pr o-portion of methane in the atmosphere since industrial revolution than in the case of carbon dioxide.
2. It is methane, rather than carbon dioxide that has been primaril

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q33. Consider the following statements:
1. An increase in tropospheric ozone conce n-tration has a warming effect on earth.
2. A decrease in stratospheric ozone concentra-tion has a cooling effect on earth.
Which of the above statement/statements is/are true
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q34. If the temperature of the lower atmo s-phere rises further it is expected that
1. people living in small islands will suffer the most.
2. coral reefs will have a higher biotic produ c-tivity and flourish.
3. agricultural production in middle and higher l
(a) 1, 2 and 3
(b) 2, 3 and 4
(c) 1, 2 and 4
(d) 1, 3 and 4

Ans: (d)

Q35. Consider the following statements:
1. Ozone is formed when nitrogen oxide reacts with hydro-carbons in presence of sunlight.
2. Ozone is broken down when it reacts with nitrogen oxide in the stratosphere.
Which of the above statement/statements is/ar
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q36. What was Montreal Protocol co n-cerned with?
(a) Checking global warming
(b) Checking ozone depletion
(c) Checking global warming and ozone depl e-tion
(d) Checking global warming, ozone depletion and protecting biodiversity.

Ans: (b)

Q37. Consider the following statements:
1. India ranked 5th among the top emitters of greenhouse gases in 2005, contributing about 5 per cent of the global emissions against US share of about 16 per cent.

Ans: (d)

Q38. Consider the following statements:
1. Kyoto Protocol provided for legally binding commitments on the part of the developed countries to reduce carbon emissions.
2. During the Cancun Conference the legally binding commitments were diluted to an agreem
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: 38

Q39. Consider the following statements:
1. Recent studies indicate trends of recovery in the ozone layer.
2. Nitrogen oxides are today the greatest threat to the ozone layer.
3. Damage to ozone layer due to chlorofluor o-carbons has abated since the impleme
(a) 1, 2 and 3
(b) 2, 3 and 4
(c) 1, 3 and 4
(d) 1, 2, 3 and 4

Ans: (a)

Q40. Land use changes are considered the second most important cause of increasing carbon dioxide content in the atmosphere after burning of fossil fuels. Which of the following practices is responsible for it the most?
(a) Increasing land use intensity to increase per hectare yields.

(b) Increasing incidence of multiple cropping.
(c) Increasing incidence of irrigated paddy farming.
(d) Deforestation for agricultural and other purposes.

Ans: (d)

Q41. Which of the following was not consi d-ered by Milankovich in his mathematical model of climatic change?
(a) Changes in the angle of inclination of the earth.
(b) Changes in the eccentricity of the earth's orbit.
(c) Precession of equinoxes.
(d) Changes in the rate of rotation of earth on its axis

Ans: (d)

Q42. Who suggested shifting of earth on its polar axis as the factors responsible for cl i-matic changes?
(a) Robert Hook
(b) Milutin Milankovich
(c) George Simpson
(d) T.C. Chamberlain

Ans: (a)

Q43. What will be the effect on the albedo of the earth if all water bodies freeze?
(a) It will increase
(b) It will decrease
(c) It will remain unchanged
(d) There is no relationship between freezing of water bodies and albedo

Ans: (a)

Q44. Why can the astronomical factors like changes in the earth's orbit not be consid-ered responsible for the rise in temperature in the alter half of the 20th century?
(a) Such changes are nothing but a myth.
(b) Changes observed in this regard presently favour a lower temperature.
(c) Such changes are too slow to explain this rise in temperature.
(d) Such changes can cause only a very small change in temperature.

Ans: (c)

Q45. Consider the following statements:
1. An important source of methane are the paddy fields in the tropical regions.
2. Digestive systems of animals also produce this gas in large amounts.
Which of the above statement/statements is/are true?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q46. What can be the benefit of parks in urban areas in terms of regional climate?
(a) They keep temperature low due to shade of trees.
(b) Watering of plants in the parks adds moi s-ture to air thus adding to warming.
(c) Parks act as carbon sinks in the otherwise concrete environment.
(d) They add to the aesthetics of the enviro n-ment.

Ans: 46

Q47. Which of the following phenomena is supposedly associated with global warming?
(a) Southern Oscillation
(b) El Nino
(c) La Nina
(d) El Nino Modoki

Ans: (d)

Q48. What would be the impact of global warming on mangrove forests?
(a) They will grow more luxurious.
(b) Large areas of mangroves will be su b-merged.
(c) Their role as carbon sinks will become more important.
(d) Both (a) and (c) above.

Ans: (b)

Q49. Which of the following is an example of autovariation in climate?
(a) Higher amount of carbon dioxide favours plant growth and higher rate of plant growth

reduces carbon dioxide in the atmosphere f a-vouring a lower temperature.
(b) Higher emissions of ozone in lower atmo s-phere raise the temperature and higher tempe r-ature leads to reduction of ozone in the trop o-sphere.
(c) Higher temperature reduces the snow cover and lesser area under snow increases the alb e-do thereby adding to global warming.
(d) All of the above.

Ans: (a)

Q50. Consider the following statements about thermal power plants:
1. A thermal power plant using coal as source of heat emits more carbon dioxide than one using natural
gas.
2. Use of brown coal in a thermal power plant in place of black coal reduces car
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q51. Consider the following statements about thermal power plants:
1. A coal fired thermal power plant has a the r-mal conversion efficiency of about 33 per cent.
2. Combined -cycle gas fired thermal power plants have higher thermal conversion eff i-ciency tha
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q52. While is carbon dioxide taken as the major contributor to global warming while methane absorbs more heat per molecule?
(i) Carbon dioxide forms a larger proportion of atmosphere. Hence the overall impact of ca r-bon dioxide is stronger.
(ii) Carbon dio
(a) (i) only
(b) (i) and (ii)
(c) (i) and (iii)
(d) (i), (ii) and (iii)

Ans: (b)

Q53. Consider the following statements:
1. Particulates and soot in atmosphere contri b-ute to global dimming.
2. Deposition of soot in high latitude areas lowers the albedo leading to atmospheric warming.
Which of the above statement/statements is/are true
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q54. Consider the following:
(i) Carbon monoxide
(ii) Nitrogen oxides
(iii) Volatile organic compounds
(iv) Carbon dioxide Which of the above co n-tribute to the formation of tropospheric ozone?
(a) (i) and (ii)
(b) (i), (ii) and (iii)
(c) (ii), (iii) and (iv)
(d) (i), (ii), (iii) and (iv)

Ans: 54

Q55. Which of the following components form a larger proportion in exhaust of a petrol engine than of a diesel engine?
(i) Nitrogen oxides
(ii) Carbon monoxide
(iii) Particulate matter
(iv) Nitrogen
(a) (i) and (ii)
(b) (i), (ii) and (iii)
(c) (ii) and (iv)
(d) (i), (ii) and (iv)

Ans: (d)

Q56. Which of the following is suggested as the cause of possibly increasing green cover in Sahel region of Africa recently?
(i) Higher temperature leading to a stronger monsoon.
(ii) Lower temperature leading to reduced tra n-spiration.

(iii) Reduced grazi
(a) *(i)* only
(b) *(i)* and (ii)
(c) (ii) and (iii)
(d) only (iii) ECOSYSTEM AND BI O-SPHERE

Ans: (a)

Q1. In general, biodiversity is
(a) Fairly evenly spread among all of the major groups of animals and plants
(b) Accurately understood by most people
(c) Widely documented, with nearly all est i-mated species described by science
(d) Declining in India and around the world

Ans: (d)

Q2. A food chain consists of
(a) Producers, consumers, decomposers
(b) Producers, carnivores, decomposers
(c) Primary producer, herbivores, carnivores
(d) Producers, primary consumers, carnivores

Ans: (a)

Q3. A grasshopper population in a prairie is limited in large part by the number of birds in the region. Following a terrible storm that killed many of the birds, the grasshop-per population exhibits exponential growth. This happens because the grasshopper
(a) A new biotic potential with steady env i-ronmental resistance
(b) A new biotic potential with decreased env i-ronmental resistance
(c) A steady biotic potential but decreased e n-vironmental resistance
(d) A decreased biotic potential and decreased environmental resistance

Ans: (c)

Q4. A group of frogs in a r ain forest repre-sents a population if the frogs
(a) Live in the same region and can potentially reproduce with each other
(b) Look similar to each other and seem to be well adapted to the same region
(c) Are preyed upon by the same group of predators and seem to be camoufl aged
(d) Live in the same region and feed on about the same types of food

Ans: (a)

Q5. A group of individuals of the same spe-cies that live and interact with each other in the same geographical area is a
(a) Family
(b) Population
(c) Genus
(d) Kingdom

Ans: (b)

Q6. A growing cooperative approach to manage larger ecosystems is building on the combined efforts of
(a) National, state, and local government age n-cies
(b) Government agencies, environmental groups, and private individuals
(c) Men, women, and children
(d) Governments and private businesses

Ans: (b)

Q7. A keystone species
(a) Has a disproportionately large impact on an ecosystem
(b) Typically reduces overall diversity of an ecosystem
(c) Is typically an herbivore
(d) Is an example of amensalism

Ans: (a)

Q8. A large oak tree with its abundant leaves glimmering in the sun on an early fall morning represents
(a) A heterotrophic producer
(b) An autotrophic consumer
(c) A heterotrophic consumer
(d) An autotrophic producer

Ans: (d)

Q9. A new store is constructed in place of a farm field, leading to increased runoff into streams, that leads to mudslides in the su r-rounding region.
This construction resulted in the loss of ec o-system capital, because it
(a) Increased erosion in the region

(b) Decreased the amount of crops grown in the region
(c) Increased the number of cars travelling in the region, to and from the store
(d) All of the above

Ans: (a)

Q10. A population of catfish in a muddy pond reaches its maximum as the food supplies start to run low. Without any new sources of food, the catfish population r emains steady. This population represents
(a) Density-dependent logistic growth
(b) Density-independent logistic growth
(c) Density-dependent exponential growth
(d) Density-independent exponential growth

Ans: (a)

Q11. A population of frogs in a pond produces many thousands of eggs each spring that hatch out into tadpoles.
However, only about 1% of the tadpoles survive to reproduce. This population of frogs is experiencing
(a) Low environmental resistance
(b) Low levels of recruitment
(c) Unlimited population growth
(d) Exponential growth

Ans: (b)

Q12. A population that is at equilibrium is
(a) Experiencing a slow rate of growth
(b) Staying at about the same size
(c) Slowly losing size because of increases in environmental resistance
(d) Has most likely just lost a key predator

Ans: (b)

Q13. A population would be expected to grow if
(a) Immigration increased and deaths and em igration decreased
(b) Immigration and emigration increased by the same number of organisms
(c) Emigration and death rates stayed the same and immigration decreased
(d) Births decreased by 1 per cent and emigr ation increased by 8 per cent

Ans: (a)

Q14. A progression of population changes that are tied to the region's industrial development and the economic wellbeing of its citizens is referred to as
(a) Demographic transition
(b) Geographical range
(c) Succession
(d) MICs

Ans: (a)

Q15. A raccoon spends its week eating raspberries, grain, eggs and grasshoppers.
Raccoons are therefore
(a) Carnivores
(b) Omnivores
(c) Herbivores
(d) Producers

Ans: (b)

Q16. A scientist is studying the flow of energy into and out of a rain forest as well as the usage of energy by the organisms that i nhabit that area. This study would be at the level of a(n):
(a) Biosphere
(b) Ecosystem
(c) Community
(d) Population

Ans: (b)

Q17. A single ecosystem will include
(a) An interactive complex of communities but not the abiotic environment
(b) The abiotic environment but not an intera ctive complex of communities
(c) Many species of living organisms and may include humans
(d) Either a plant community or an animal community, but not both

Ans: (c)

Q18. A squirrel population in the Punjab region is limited by its eagle predators, the amount of acorns produced annually, nes ting sites in the trees and cold winter te mperatures. Which of the following is an ab iotic factor limiting this squirrel populati
(a) The eagles in the region

(b) The number of acorns produced annually
(c) The stress of cold winter temperatures
(d) The number of available nesting sites

Ans: (c)

Q19. A stable population would remain stable if
(a) the birth rate increased as the death rate decreased
(b) emigration rates and death rates increased equally
(c) births and immigration increased by the same number of organisms
(d) births and deaths increased by the same number of organisms

Ans: (d)

Q20. Adding fertiliser to most aquatic systems results in
(a) increased growth of phytoplankton and hypoxic conditions
(b) increased growth of phytoplankton and hyperoxic conditions
(c) decreased growth of phytoplankton and hypoxic conditions
(d) decreased growth of phytoplankton and hyperoxic conditions

Ans: (a)

Q21. Alien species that are most harmful are those that
(a) struggle to fit into new ecosystems and eventually die out
(b) eventually become naturalised
(c) become invasive
(d) become agricultural products

Ans: (c)

Q22. Approximately _____ per cent of the stored energy of an organism at one level of a food web is transferred to the tissues of the organism that consumes it at the next level of the food web.
(a) 50
(b) 100
(c) 25
(d) 10

Ans: (d)

Q23. As successional changes occur in an ecosystem, new species take advantage of new conditions. Where do these new species come from?
(a) They evolve from other species in the immediate region
(b) They come from surrounding ecosystems in other stages of succession
(c) They are planted by forest rangers managing these forest ecosystems
(d) The seeds of the new species are carried in by large streams and rivers

Ans: (b)

Q24. You sail in your boat, passing the alligators, turtles and tall marsh grasses on your journey through a forest. This magnificent ecosystem is one of the most famous examples of
(a) an estuary
(b) a lake
(c) a wetland
(d) a freshwater stream

Ans: (c)

Q25. Because of biomagnification, the most toxic organisms in any ecosystem will be the
(a) producers
(b) primary consumers
(c) secondary consumers
(d) soils

Ans: (c)

Q26. Biomes characterise regions with similar types of
(a) vegetation and climatic conditions
(b) animals and plants
(c) soil, water systems and animals
(d) rocks, soil, minerals and water

Ans: (a)

Q27. Biomes with less than 25 cm of rain a year are
(a) very warm
(b) very cold
(c) covered with coniferous trees
(d) deserts

Ans: (d)

Q28. Biomes with more than 75 cm of rain a year which never experience freezing temperatures are most likely found
(a) at high altitudes
(b) nearest the equator at low altitudes
(c) at high altitudes in temperate zones
(d) at high altitudes and high latitudes

Ans: (d)

Q29. Bison grazing on grasses growing in a meadow represents
(a) a consumer eating a producer
(b) a producer eating a consumer
(c) two consumers
(d) two producers

Ans: (a)

Q30. Dung beetles quickly bury and recycle cattle droppings and live in regions where cattle graze. The relationship between the dung beetles and the cattle is a type of
(a) mutualism
(b) parasitism
(c) intraspecific competition
(d) interspecific competition

Ans: (a)

Q31. By design, the molecules that resist biodegradation and include some of the most problematic persistent organic pollutants are the
(a) synthetic organic compounds
(b) synthetic inorganic compounds
(c) recycled heavy metals
(d) chlorinated heavy metals

Ans: (a)

Q32. Compared to an ecosystem with just a single stage of succession, an ecosystem with a variety of successional stages
(a) is more likely to experience forest fires
(b) has greater biodiversity
(c) is less likely to experience erosion
(d) has a much lower rate of primary productivity

Ans: (b)

Q33. Competitive exclusion is not as common as many biologists expected, in large part because
(a) there just are not that many species of organisms on Earth
(b) ecosystems are more homogeneous than was appreciated
(c) even when two species share an identical niche, they find a way to cooperate
(d) heterogeneous environments allow apparent competitors to occupy separate niches

Ans: (d)

Q34. Consumers that eat plants rely upon
(a) chemical energy stored in organic molecules produced by photosynthesis
(b) kinetic energy stored in organic molecules produced by photosynthesis
(c) photosynthesis to convert potential energy to kinetic energy
(d) entropy to generate heat to drive kinetic processes in their bodies

Ans: (a)

Q35. Dung beetles feeding on the waste of cattle, grazing on hay in a field, represent
(a) a decomposer feeding on the wastes of a consumer eating a producer
(b) a producer feeding on the wastes of a producer eating a consumer
(c) a producer feeding on the wastes of a consumer eating a producer
(d) a consumer feeding on the wastes of a decomposer eating a producer

Ans: (a)

Q36. Ecosystem management values most
(a) ecological sustainability
(b) economic productivity
(c) recreational use of managed regions
(d) opportunities to harvest natural resources

Ans: (a)

Q37. Ecosystem sustainability primarily results from the
(a) relationships between the organisms in an ecosystem
(b) number of predators found in the ecosystem

(c) frequency of fires or other natural disasters in an ecosystem
(d) total amount of biomass that exists in an ecosystem

Ans: (a)

Q38. Ecotones
(a) contain only species found in the bordering ecosystems
(b) have the same abiotic characteristics as the bordering ecosystems
(c) consist of two or more landscapes
(d) are transitional regions between ecosystems

Ans: (d)

Q39. Energy
(a) and nutrients flow through ecosystems
(b) and nutrients cycle within ecosystems
(c) cycles within and nutrients flow through ecosystems
(d) flows through and nutrients cycle within ecosystems

Ans: (d)

Q40. Extinction of a weaker species by an aggressive alien species is the results of
(a) endemism of weaker species
(b) habitat loss
(c) the Domino effect
(d) all of the above

Ans: (d)

Q41. Fog is a component of the
(a) hydrosphere
(b) biosphere
(c) atmosphere
(d) lithosphere

Ans: (c)

Q42. Heavy metals can quickly move through ecosystems because they
(a) are soluble in water
(b) quickly dissolve in the fats of animals
(c) quickly become incorporated into sugars and starch
(d) easily clump together and bind tightly to soil compounds

Ans: (a)

Q43. Humans are the targets for improving the quality of the environment and genera t- ing sustainable ecosystems because
(a) as a species, we consume a disproportio n- ate amount of resources by comparison to any other group of living organisms
(b) only humans can correct the issues created by other organisms
(c) we have the ability to reverse the destru c- tive trends that have been created by human activity
(d) (a) and (c) are correct

Ans: (d)

Q44. Humans often manipulate the environment in ways that decrease the overall ecosystem capital because
(a) short-term gains are often local while long - term losses in regulating and cultural services are experienced regionally
(b) short-term gains are often regional while long-term losses in regulating and cultural services are experienced locally
(c) long-term gains are often local while short - term losses in regulating and cultural services are experienced regionally
(d) long-term gains are often regional while short-term losses in regulating and cultural services are experienced locally

Ans: (a)

Q45. In a food chain consisting of toxic soil, toxic grasses, rabbits that eat the toxic grass and hawks that eat the rabbits, the highest concentrations of toxins would occur in the
(a) tissues of the grasses
(b) tissues of the rabbits
(c) tissues of the hawks
(d) soils

Ans: (c)

Q46. In a food chain, biomagnification is the result of
(a) bioaccumulation up the trophic levels
(b) bioaccumulation down the trophic levels
(c) higher levels of toxins than in the orga n- isms living in that region
(d) the elimination of toxic wastes from the body

Ans: (a)

Q47. In a forest, deer, raccoons, squirrels and other animals eat and find shelter. A detritus food web occurs as their wastes accumulate on the forest floor. In this detritus web:
(a) Deer and raccoons function as the producers
(b) Fungi and earthworms function as producers
(c) Decomposers function as consumers
(d) The deer and raccoons represent decomposers

Ans: (a)

Q48. In a graphical representation of an organism's population growth in a given habitat, the growth rate for an organism whose population is increasing according to their biotic potential is best represented by
(a) an S-shaped curve
(b) a line with a negative slope
(c) a flat line (no slope) set at the carrying capacity of the environment
(d) an exponential growth curve

Ans: (d)

Q49. In an ecosystem with many similar species, we typically find
(a) intense interspecific competition for food
(b) competitors using different resources
(c) intense interspecific competition for nesting sites
(d) adaptations for battles and interspecific competition

Ans: (b)

Q50. In an ecosystem, the replacement of one new species for another because of direct competition for the same resources defines
(a) intraspecific competition
(b) the competitive exclusion principle
(c) character displacement
(d) resource partitioning

Ans: (b)

Q51. In any food web, biomagnification will result in the highest concentrations of toxins in the
(a) lowest trophic level
(b) highest trophic level
(c) highest photosynthetic trophic level
(d) herbivores of the systems

Ans: (b)

Q52. In case of a parasitic food chain, the shape of the pyramid of number is always
(a) upright
(b) linear
(c) inverted
(d) not certain

Ans: (c)

Q53. In general, most ecosystems in the world have
(a) remained relatively unchanged for millions of years
(b) been impacted by human activities
(c) experienced increased ecosystem capital because of human activities
(d) already been significantly harmed by global climate change

Ans: (b)

Q54. In logistic growth, how does population growth change as the population nears its carrying capacity?
(a) Population growth increases
(b) Population growth remains steady
(c) Population growth decreases
(d) Population growth typically crashes when a population reaches its carrying capacity

Ans: (c)

Q55. Living organisms draw their essential elements from
(a) the atmosphere
(b) the lithosphere
(c) the atmosphere and lithosphere
(d) the atmosphere, lithosphere and hydrosphere

Ans: (d)

Q56. Maintaining sustainable human exploitation of ecosystem capital will be increasingly difficult because of
(a) the over reliance on grains and other plants as a significant portion of the human diet
(b) the expanding number of viral and bacterial human diseases
(c) the growing human population on Earth
(d) decreases in worldwide ocean levels

Ans: (c)

Q57. Many predator–prey relationships do not result in the complete elimination of the prey because
(a) the predators cannot catch all of the healthy adults
(b) the predator population is limited by the availability of its food source
(c) the prey do not provide enough nutrition
(d) the prey are toxic

Ans: (a)

Q58. Most ecosystems
(a) are sharply divided from other ecosystems
(b) consist of two or more landscapes
(c) grade into other ecosystems in regions called ecotones
(d) are clustered with other ecosystems to form communities

Ans: (c)

Q59. Most organisms living in a desert community are
(a) well adapted to the heat and dry environment
(b) well adapted to the heat but probably not the dry environment
(c) well adapted to the dry environment but probably not the heat
(d) not well adapted to the heat or dry environment

Ans: (a)

Q60. Most warm desert biomes of the world are located
(a) about 20° –30° latitude north or south of equator
(b) in Asia
(c) along a coastline
(d) along the equator

Ans: (a)

Q61. Neena gets a new baby turtle from a friend and is told to feed it worms. For the first few months, the turtle seemed to grow fine. But as time passed, the turtle's shell appeared soft and fragile. Someone suggested that the turtle might not be gettin
(a) a limiting factor
(b) an environmental condition
(c) a habitat condition
(d) a natural environmental stressor

Ans: (a)

Q62. Off the shore in Japan deep in the ocean where no sunlight can penetrate are found communities in which bacteria have special enzyme that allows them to form organic matter through chemosynthesis. These communities nestle around hydrothermal vents wh
(a) a primary producer synthesises organic matter
(b) a producer exists without sunlight
(c) a consumer eats a producer
(d) there are no producers in the ecosystem

Ans: (b)

Q63. Omnivores differ from carnivores in that omnivores derive their energy from
(a) plants, animals and detritus
(b) plants and animals
(c) animals
(d) green plants

Ans: (b)

Q64. On a vacation, you spend much of the day relaxing on an ocean beach soaking up the sun. The beach where you are spending your time is a good example of
(a) a landscape
(b) an ecotone
(c) a biome
(d) a population

Ans: (b)

Q65. On some islands, during the mating season, birds compete intensely for breeding

sites. On these islands, these breeding sites represent
(a) a limiting factor
(b) a zone of stress
(c) an environmental condition
(d) a limit of tolerance

Ans: (a)

Q66. One of the greatest human impacts on natural ecosystems results from
(a) the disruption of natural biogeochemical cycles
(b) the generation of electricity from nuclear energy
(c) the use of our oceans for shipping and transportation
(d) the use of the sun and wind to generate electricity

Ans: (a)

Q67. Organisms that feed on the bodies of dead organisms are known as
(a) primary consumers
(b) herbivores
(c) decomposers
(d) omnivores

Ans: (c)

Q68. Population sizes begin to stabilise near the carrying capacity when
(a) environmental resistance begins to limit the population's biotic potential
(b) zero population is achieved
(c) the number of species in the environment begins to decrease
(d) the replacement fertility rate reaches 2.1

Ans: (a)

Q69. Populations of species that occupy the same geographic area and interact with each other are collectively called
(a) an ecosystem
(b) a community
(c) a drift
(d) a biosphere

Ans: (b)

Q70. Primary productivity of the open oceans is very limited because of
(a) the shortage of water
(b) the shortage of light
(c) the shortage of nutrients
(d) low temperature

Ans: (c)

Q71. Productivity of an ecosystem is best determined by the
(a) total amount of biomass in the system
(b) number of individuals of each species
(c) number of species present in the ecosystem
(d) amount of biomass added each year

Ans: (d)

Q72. Rahul is enjoying a salad with lettuce coated by mushrooms, tomatoes, carrots and bits of meat from grain -fed chicken. Rahul's salad represents
(a) producers, consumers and decomposers
(b) only producers and consumers
(c) only producers and carnivores
(d) only producers

Ans: (c)

Q73. Regulating and cultural services provided by natural ecosystems
(a) are typically the most economically valued components of ecosystems
(b) are public goods usually provided by ma r-kets
(c) include goods such as fresh water, wild foods and livestock
(d) are essential but difficult to value in mon e-tary terms

Ans: (d)

Q74. Restoration ecologists try to
(a) restore destroyed or damaged ecosystems to their native conditions
(b) create new ecosystems with new ecosystem functions in place of other natural ecosystems
(c) create enclosures for zoos that imitate the abiotic components of natural environments
(d) modify ecosystems into national forests and parks where people can best interact with nature

Ans: (a)

Q75. Some beetles escape from a ship and fly to a small island covered with grass but with no trees or beetle predators.
As the beetles feed, they destroy all the grasses. But with abundant food, the beetle population soars, doubling in size every month.
(a) constant growth followed by equilibrium
(b) a population that has stabilised near its carrying capacity
(c) exponential growth followed by a population crash
(d) logistic growth ending at its carrying capacity

Ans: (c)

Q76. Sustainable exploitation of natural ecosystems will most likely
(a) increase the ecosystem capital of the ecosystem
(b) decrease the ecosystem capital of the ecosystem
(c) maintain the ecosystem capital of the ecosystem
(d) convert the natural resources into ecosystem capital

Ans: (c)

Q77. Sustainable populations
(a) are often near their carrying capacity
(b) have exceeded their biotic potential
(c) have grown beyond all types of environmental resistance
(d) are characterised by high emigration and low recruitment

Ans: (a)

Q78. The ability of an ecosystem to replenish itself leads to
(a) sustainability
(b) decreasing consumptive use
(c) the conversion of ecosystem capital from one form to another
(d) increasing natural resources but declining ecosystem capital

Ans: (a)

Q79. The best ecosystem management requires
(a) good stewardship and sustainability
(b) planned disturbances and careful timing
(c) restoration ecologists
(d) government regulation and national control

Ans: (a)

Q80. The cattle were removed from a field and shrubs and bushes were seen dotting the grass-covered hillsides. A few years later, small pine trees and then larger deciduous trees appeared. Now, there are so many trees and shaded regions and it is difficul
(a) a climax ecosystem
(b) primary succession
(c) a sustained biome
(d) intermediate succession

Ans: (a)

Q81. The creation of a new species is mostly like
(a) designing a new home and building it
(b) remodelling an old home into a new one
(c) using parts of many junked cars to construct a new one
(d) creating a virtual car on a computer

Ans: (b)

Q82. The eagle predators, the amount of acorns produced annually, nesting sites in the trees and cold winter temperatures limit the squirrel population in the Punjab region. The many factors listed above that can affect the squirrel population represent
(a) environmental resistance
(b) the carrying capacity of the squirrel population
(c) the squirrel's life history
(d) the biotic potential of the squirrel population

Ans: (a)

Q83. The entire biosphere is distributed into how many biogeographic regions?
(a) Six
(b) Eight
(c) Nine
(d) Twelve

Ans: (b)

Q84. The food chain in an ecosystem helps to maintain
(a) the feeding relationship in nature, thus bi o-diversity
(b) flow of energy in the ecosystem
(c) passage of nutrients in the ecosystem
(d) all of the above

Ans: (b)

Q85. The graphical representation of an organism's position as well as function at successive trophic levels is called
(a) food chain
(b) food web
(c) ecological pyramid
(d) biomagnifications

Ans: (c)

Q86. The graphical representation of the interrelation of producer and consumer in an ecosystem is termed as
(a) ecological niche
(b) ecological pyramid
(c) trophic levels
(d) food web

Ans: (b)

Q87. The greatest biodiversity would be an ecosystem with the same number of species as other ecosystems but which has
(a) no dominant species
(b) only a single dominant species
(c) more consumers species than producer sp e-cies
(d) several dominant species in intense comp e-tition with each other

Ans: (a)

Q88. The importance of ecosystem lies in
(a) transfer of food
(b) flow of energy
(c) cycling of materials
(d) both *(b)* and *(c)*

Ans: (b)

Q89. The interdependence of the living organisms among themselves and with the environment is called
(a) ecology
(b) ecosystem
(c) biology
(d) anthology

Ans: (b)

Q90. The main categories of biomes are based upon differences in
(a) climatic conditions
(b) the ratio of plants to animals in the biome
(c) the particular continent on which they are found
(d) the density of the plants in the biome

Ans: (a)

Q91. The main source of energy in an ecosystem is
(a) sugar stored in plants
(b) solar energy
(c) heat released during transpiration
(d) heat released during fermentation

Ans: (b)

Q92. The most stable predator –prey relationships typically involve
(a) a prey species and several natural predators
(b) two species of carnivores eating each other
(c) only bottom–up population regulation
(d) only top–down population regulation

Ans: (a)

Q93. The most sustainable worldwide e x-pansion of aquaculture is the production of
(a) herbivorous species in the openocean
(b) carnivorous species in the openocean
(c) herbivorous species in estuarine waters
(d) carnivorous species in lakes and rivers

Ans: (a)

Q94. The names of major habitats present in the biosphere are
(a) freshwater and terrestrial ecosystem
(b) marine and man-engineered ecosystem
(c) all of the above
(d) none of the above

Ans: (b)

Q95. The natural succession of a small farm pond will tend to
(a) increase the total amount of shoreline

(b) increase the depth of the pond
(c) increase the amount of water in the pond
(d) make the pond more likely to freeze solid in the winter

Ans: (d)

Q96. The phenomenon of accumulation of non-biodegradable contaminants in higher trophic level is known as
(a) bioprospecting
(b) biomagnification
(c) biopiracy
(d) bioremediation

Ans: (b)

Q97. The population of a particular species that an ecosystem can sustain indefinitely is called its
(a) habitat distribution
(b) climax community
(c) carrying capacity
(d) environmental range

Ans: (c)

Q98. The quantity of the abiotic material present in an ecosystem is known as
(a) concentration
(b) standing stage
(c) non-living stage
(d) none of above

Ans: (b)

Q99. The science of systems of control in an ecosystem is known as
(a) syncology
(b) cybernetics
(c) biocoenoses
(d) none of the above

Ans: (c)

Q100. The scientific study of the geographic distribution of plants and animals is called
(a) biodiversity
(b) biogeography
(c) ecology
(d) biology

Ans: (a)

Q101. The sequence of organisms which feed on one another for their survival is known as
(a) passage of nutrients from one organism to other
(b) food chain
(c) trophic level
(d) biodiversity

Ans: (b)

Q102. The structure and maintenance of all ecosystems results from the
(a) microbes in that ecosystem
(b) types of plants in that ecosystem
(c) types of animals in that ecosystem
(d) organisms in that ecosystem

Ans: (d)

Q103. The study of interaction between the living species and the environment is called
(a) biology
(b) anthology
(c) ecology
(d) zoology

Ans: (c)

Q104. The total living component of an ecosystem is its
(a) geographic range
(b) carrying capacity
(c) biomass
(d) biotic potential

Ans: (b)

Q105. The value of many natural ecosystem services is most apparent as
(a) we appreciate the damages that result from the disruption of these ecosystems
(b) new technologies allow us to more carefu l-ly measure these ecosystems
(c) research into alternate energy resources continues
(d) new species are discovere d and described by scientists

Ans: (a)

Q106. There was once a bare rock which was invaded by moss accumulating at the beginnings of the soil. After several years

enough, soil has become established that grasses begin to grow. Without the moss building up soil, the grasses would have had no cha
(a) a climax ecosystem
(b) primary succession
(c) secondary succession
(d) intermediate succession

Ans: (b)

Q107. To feed its young, an owl captures mice that eat grains. The owl also eats small snakes that feed on these mice. The diet of owls represents the roles of
(a) a primary and secondary consumer
(b) a secondary and tertiary consumer
(c) an herbivore and a carnivore
(d) a producer and a consumer POLLUTION

Ans: (b)

Q108. In Kolkata, major air pollution is caused by
(a) fungal spores
(b) algae
(c) hydrocarbons
(d) carbon monoxide

Ans: (d)

Q109. About 100 meters downstream of a sewage discharge outlet, we would expect to find
(a) cloudy water, low levels of oxygen, and few, if any, fish
(b) cloudy water, high levels of oxygen, and abundant fish
(c) clear water, low levels of oxygen, and few, if any, fish
(d) clear water, high levels of oxygen, and abundant fish

Ans: (a)

Q110. About one hundred years ago, cities began to address the problems of sewage disposal by dumping sewage into storm water drainage systems. One of the results of this strategy was that
(a) cities no longer needed to treat drinking water that was drawn from nearby river sy stems
(b) the quality of the water in the local riv ers and streams greatly improved
(c) people living upriver of these cities were more likely to experience contamination of their drinking water sources
(d) people living downriver of these cities were more likely to experience contamination of their drinking water sources

Ans: (d)

Q111. According to public health officials, which of the following may be caused by water pollutants?
(a) Skin rashes
(b) Miscarriages and birth defects
(c) Nervous disorders
(d) All of the above

Ans: (d)

Q112. Acid rain concentrated in the eastern portions of the United States is primarily the result of
(a) nuclear power plants in the region
(b) coal-burning power plants in the Midwest
(c) coal-burning power plants in north -eastern Canada
(d) off-shore oil drilling rigs along the east coast of the United States

Ans: (b)

Q113. Air pollutants most often lead to h u-man health problems of the
(a) circulatory and respiratory systems
(b) circulatory and digestive systems
(c) integumentary and muscular systems
(d) muscular and skeletal systems

Ans: (a)

Q114. Air pollution in a heavily industria l-ised region would be reduced and the air would be healthier if that region
(a) received less rain
(b) received less sunshine
(c) were next to an ocean
(d) used more coal to generate electricity

Ans: (c)

Q115. Although the use of wastewater effl u-ents for irrigation can be very beneficial, it is essential that the effluents are
(a) treated and free of pathogens
(b) mixed in with large amounts of phosphorus
(c) mixed in with large amounts of calcium carbonate
(d) not used in regions contacted by humans
Ans: (a)

Q116. Anaerobic conditions will most likely be generated in a natural water system with
(a) high levels of DO that is contaminated by pollutants with high BOD values
(b) low levels of DO that is contaminated by pollutants with high BOD values
(c) high levels of DO that is contaminated by pollutants with low BOD values
(d) low levels of DO that is contaminated by pollutants with low BOD values
Ans: (b)

Q117. Because of catalytic converters on the exhaust systems of automobiles, you breathe air with lower levels of
(a) carbon monoxide and nitrogen oxides
(b) carbon dioxide and nitrogen
(c) carbon monoxide and carbon dioxide
(d) carbon dioxide and nitrogen oxides
Ans: (a)

Q118. Biopesticides
(a) often take 3 –5 years to gain approval b e-cause of their complex mechanisms of action
(b) require more training for proper application than more traditional pesticides
(c) are often so ineffective that they must be replaced by more toxic pesticides
(d) are naturally occurring biochemicals such a pheromones
Ans: (d)

Q119. Burning fossil fuels in a low oxygen environment will most likely produce
(a) carbon monoxide
(b) hydrogen peroxide
(c) sulphuric acid
(d) radon gases
Ans: (a)

Q120. Carcinogens are dangerous because they affect
(a) oxygen-carrying red blood cells
(b) the ability of the lining of the lungs to a b-sorb oxygen
(c) DNA molecules inside cells
(d) the ability to absorb nutrients in the wall of the intestines
Ans: (c)

Q121. CFCs primarily contribute to the de-struction of the ozone by
(a) producing chlorinated gases that reflect back a significant amount of ultraviolet light
(b) releasing carbon monoxide into the strat o-sphere, which reacts with the oxygen in ozone
(c) releasing gases into the stratosphere that block the enzymes that create ozone
(d) contributing chlorine, which acts as a cat a-lyst in the breakdown of ozone
Ans: (d)

Q122. Compared to persistent pesticides, nonpersistent pesticides are
(a) less likely to cause resurgences, secondary - pest outbreaks or promote pesticide resistance
(b) more likely to cause resurgences, secon d-ary-pest outbreaks or promote pesticide r e-sistance
(c) equally as likely to cause resurgences, se c-ondary-pest outbreaks or promote pesticide resistance
(d) more likely to cause resurgences and se c-ondary-pest outbreaks but less likely to pr o-mote pesticide resistance
Ans: (c)

Q123. DDT is a
(a) biochemical pollutant
(b) biodegradable pollutant
(c) non-biodegradable pollutant
(d) non-pollutant
Ans: (a)

Q124. DDT quickly became widely used be-cause it
(a) was toxic to many types of insects
(b) seemed much less toxic to mammals

(c) was inexpensive
(d) all of the choices are correct

Ans: (d)

Q125. DDT was least effective in combating
(a) mosquitoes
(b) rodents
(c) beetles
(d) defoliating insects such as the spruce bu d-worm

Ans: (b)

Q126. Denitrification in sewage treatment systems requires
(a) the bubbling of oxygen into waste sewage
(b) the addition of water to waste sewage
(c) an anaerobic environment
(d) an aerobic environment

Ans: (c)

Q127. Environmental pollution often de-creases biodiversity by
(a) dramatically changing abiotic factors in the environment
(b) introducing new species to a region
(c) overexploiting organisms in their natural environments
(d) reducing the number of pathogens in a r e-gion

Ans: (a)

Q128. Gases such as nitrous oxide and ca r-bon dioxide are called greenhouse gases be-cause
(a) they block specific wavelengths of sunlight from penetrating
(b) they block sunlight from reaching the Earth
(c) they block both sunlight and heat energy from penetrating the atmosphere
(d) these gases permit sunlight to enter but trap the heat energy in the atmosphere

Ans: (a)

Q129. Global documentation of pesticide poisoning
(a) reveals a dramatic decline in cases in the last 5 years, due primarily to WHO standards
(b) reveals a dramatic increase in cases in the last 10 years, as more pesticides are used
(c) indicates an increase in herbicide but not pesticide poisoning
(d) is not occurring, and no official data can be tracked for trends

Ans: (d)

Q130. Harmful algal blooms appear to be linked to unusually high levels of nutrient pollution. Which of the following is the most likely source of nutrient pollution in a river drainage system associated with an algal bloom?
(a) A coal-fired power plant
(b) A nuclear power plant
(c) Chicken and hog farms
(d) A large shopping mall

Ans: (c)

Q131. Health problems associated with i n-door air pollution in developing countries is most commonly associated with
(a) chlorine gas released from tap water
(b) the use of biofuels for cooking and heating
(c) poor hygiene and sanitation inside the home
(d) the widespread use of pesticides to control disease vectors

Ans: (b)

Q132. If the trends in pesticide use over the past 30 years continue into the future, we can expect that pesticide use will
(a) drop to near zero in the next decade
(b) continue to decrease slowly
(c) increase gradually
(d) double in the next ten years

Ans: (b)

Q133. In the United States, the greatest en-vironmental destruction results from the harvesting of
(a) oil
(b) natural gas
(c) coal
(d) timber

Ans: (c)

Q134. In which of the following regions would we most expect to find industrial smog?
(a) In southern Florida in high tourist regions along the beaches
(b) In a farming region that primarily produces either cotton, soybeans or corn
(c) Around an industrial town that burns coal to generate electricity and make steel
(d) Around a city that primarily relies on n u-clear energy and public transportation

Ans: (c)

Q135. Many polluted ecosystems will reco v-er if we stop polluting them. This illustrates
(a) the movement of energy through ecosy s-tems
(b) the essential role of keystone predators in ecosystems
(c) the effects of latitude and altitude
(d) the natural resilience of ecosystems

Ans: (d)

Q136. Most of the air pollution that we ex-perience is located in the
(a) mesosphere
(b) thermosphere
(c) stratosphere
(d) troposphere

Ans: (d)

Q137. Most of the public health impacts from air pollution are the result of
(a) a single pollutant in a short period
(b) many pollutants in a short period
(c) a single pollutant over a long period
(d) many pollutants over a long period

Ans: (d)

Q138. None of the three most popular methods for treating sludge and converting it into fertiliser is able to produce a final treated product that is
(a) biodegradable
(b) sterile
(c) able to be used as a fertiliser
(d) free of heavy metals

Ans: (d)

Q139. Non-persistent pesticides can be more dangerous than persistent pesticides be-cause they usually
(a) are more toxic
(b) last longer in the environment
(c) are radioactive
(d) are broken down into nontoxic products within a few weeks of application

Ans: (a)

Q140. Persistent organic pollutants (POPs) reach toxic levels in organisms in natural ecosystems in large part because of biomag-nification, in which the highest concentra-tions of POPs are found in
(a) primary producers
(b) secondary producers
(c) primary consumers
(d) secondary consumers.

Ans: (d)

Q141. Pesticide exposure has been clearly linked to
(a) malaria and bubonic plague
(b) viral outbreaks
(c) cancer, neurological disorders and infertil i-ty
(d) heart disease and strokes

Ans: (c)

Q142. Pesticide exposure has been shown to cause diseases of the
(a) endocrine and immune systems
(b) muscular and skeletal systems
(c) pancreas and kidneys
(d) ears and eyes

Ans: (a)

Q143. Pesticide regulations address co n-cerns about the safety of those applying the pesticides, pesticide residues on food and the effects of pesticides on
(a) human health
(b) the environment
(c) human health and the environment
(d) human health, the environment and the l o-cal culture

Ans: (c)

Q144. Pesticide resistance against one pesticide
(a) is restricted to that one kind of pesticide
(b) can provide protection against other kinds of pesticides
(c) can provide protection against herbivores
(d) often harms insects by decreasing their ability to reproduce

Ans: (b)

Q145. Pesticide -resistant insects develop from the widespread use of insecticides because
(a) pesticides cause mutations in the insects that make them resistant
(b) pesticides increase the productivity of some insects
(c) insects learn to avoid the places where insecticides have been applied
(d) over many generations, the naturally resistant pests increase in number

Ans: (d)

Q146. Pesticide-resistant insects would
(a) have evolved more slowly if the pesticides were used in just a few regions.
(b) not have evolved if even more pesticide had been used
(c) have evolved if a different type of pesticide was used each year
(d) have evolved if an herbicide had been used instead of a pesticide

Ans: (a)

Q147. Potential environmental damage results from the harvesting of fossil fuels and their
(a) transportation and waste products generated by their use
(b) transportation and storage
(c) storage and waste products
(d) transportation, storage and waste products generated by their use

Ans: (d)

Q148. Power plants are undergoing a process known as 'scrubbing' that is expected to improve conditions associated with
(a) acid rain
(b) deforestation
(c) ozone depletion
(d) the greenhouse effect

Ans: (d)

Q149. Premature ageing of the skin and cataracts are on the increase due to increased
(a) levels of sulphur dioxide in the atmosphere
(b) levels of carbon monoxide in the atmosphere
(c) exposure to ultraviolet light
(d) exposure to infrared radiation from the sun

Ans: (c)

Q150. Questions about the danger of a particular chemical hazard will relate to that chemical's
(a) toxicity, exposure and dose
(b) exposure in the natural environment
(c) toxicity and abundance in the environment
(d) ability to dissolve in either water or oil

Ans: (a)

Q151. Rain with a pH of 4.6 is
(a) about 10 times more basic than rain from non-polluted regions
(b) typical of regions with very low pollution
(c) about 10 times more acidic than rain from non-polluted regions
(d) about 100 times more acidic than rain from non-polluted regions

Ans: (c)

Q152. Recent studies indicate that two of the most dangerous components of air pollution in and around major cities in the developed nations are
(a) fine particles and sulphur pollution
(b) carbon monoxide and ozone
(c) lead and volatile organic compounds
(d) radon and carbon monoxide

Ans: (a)

Q153. Regions where humans produce high levels of aerosols and dust will most likely experience
(a) less rainfall and reduced solar radiation to the Earth's surface

(b) less rainfall and increased solar radiation to the Earth's surface
(c) more rainfall and reduced solar radiation to the Earth's surface
(d) more rainfall and increased solar radiation to the Earth's surface

Ans: (a)

Q154. Second-generation pesticides are synthetic versions of
(a) heavy metals
(b) the types of molecules used to build cells
(c) ions and salts
(d) vitamins and minerals

Ans: (b)

Q155. Secondary air pollutants are formed by
(a) the evaporation of solvents and gasoline
(b) the incomplete combustion of fuels
(c) primary pollutants reacting with other compounds in the atmosphere
(d) radioactive substances such as radon reacting with primary pollutants

Ans: (c)

Q156. Some city water treatment facilities combine storm water and sanitary sewage systems. During heavy storms, these treatment facilities may be overwhelmed with water and untreated storm water mixes with sewage and flows directly back into the streams
(a) Do not collect rainwater in storm sewers and let it just accumulate on the roads
(b) Collect and treat storm sewer and sanitary sewage systems separately
(c) Drain the sewage system onto a field near the stream or river
(d) Use the excess sewer water as a source of water for the city

Ans: (b)

Q157. Some of the most toxic halogenated hydrocarbons, widely used in plastics, pesticides and solvents, are the
(a) heavy metals
(b) chlorinated hydrocarbons
(c) sulphated hydrocarbons
(d) radioactive hydrocarbons

Ans: (b)

Q158. Some people become alarmed when they learn that the water they drink contains known carcinogens. These concerned people
(a) are rightly alarmed, because all municipal drinking water should be free of any carcinogens
(b) should be somewhat alarmed, but might be comforted by knowing that some of these carcinogens are only known to cause cancer in mice
(c) should know that it is the concentration, and not the presence of carcinogens, that is of greatest concern
(d) should not be concerned, because it is the combination of carcinogens, and not the presence of any one carcinogen, that poses a health risk

Ans: (c)

Q159. Studying environmental biology has got you thinking about what you do with your kitchen wastes, the discarded egg shells, orange and banana peels, coffee grounds, etc. Living at the edge of town, you have several options.
Which of the following woul
(a) Collecting your kitchen garbage in small plastic bags and disposing of it in a large city landfill
(b) Collecting your kitchen garbage in paper bags and disposing of it in a large city landfill
(c) Spreading your kitchen wastes on the top of a garden
(d) Burying your kitchen wastes in your garden

Ans: (a)

Q160. Technologies to reduce sulphur dioxide emissions are
(a) widely used in power plants that burn coal
(b) not possible with available technology
(c) costly and experimental, but promising
(d) less important than technologies to reduce carbon dioxide pollution

Ans: (a)

Q161. The abundant formation of hydroxyl radicals in the atmosphere
(a) removes many common pollutants from the stratosphere
(b) removes many common pollutants from the troposphere
(c) promotes the formation of ozone that pr o-tects against damaging ultraviolet light
(d) promotes the formation of nitrous oxides that in turn lower levels of carbon dioxide

Ans: (b)

Q162. The aesthetic losses from polluted air are reflected in the
(a) destruction of the stratospheric ozone
(b) rising cases of asthma near industrial ce n-tres
(c) degradation of outdoor stone sculptures and masonry
(d) declining productivity of agriculture downwind of cities

Ans: (c)

Q163. The atmospheric brown cloud over much of China may be reduced by
(a) switching from biomass to coal as sources of energy
(b) switching from natural gas to the use of biomass fuels
(c) climate change that promotes temperature inversions
(d) reducing the reliance on biomass and fossil fuels for energy

Ans: (d)

Q164. The best way to reduce the pollution of agricultural fertiliser runoff from farm fields is
(a) to treat the water before it reaches streams or rivers
(b) reduce the amount fertiliser leaving the farm fields
(c) add chemicals into the rivers and streams that neutralise the fertilisers
(d) raise crops in the r ivers and streams that use the fertilisers

Ans: (b)

Q165. The carrot peelings you send down a garbage disposal represent which of the fol-lowing types of wastewater pollutant?
(a) Debris and grit
(b) Dissolved inorganic material
(c) Colloidal and dissolved organic material
(d) Particulate organic matter

Ans: (d)

Q166. The dangers of widespread DDT use are largely due to two main characteristics of DDT, its
(a) bioremediation and nonpersistence
(b) degradation and nonpersistence
(c) biomagnification and persistence
(d) bioremediation and persistence

Ans: (c)

Q167. The effectiveness of DDT in agricu l-ture allowed growers to
(a) raise less resistant but more productive crops
(b) raise crops through the winter months
(c) raise vegetables without the need for poll i-nators
(d) eliminate irrigation in fields where it had been used previously

Ans: (a)

Q168. The future use of nuclear energy to power personal transportation largely de-pends on
(a) safe ways to store nuclear wastes
(b) more efficient turbogenerator technology
(c) low-cost, lightweight batteries that can store large amounts of power
(d) the development of small thermonuclear engines for automobiles

Ans: (c)

Q169. The greatest progress in reducing atmospheric levels of lead pollution resulted from
(a) the elimination of leaded gas
(b) the switch from lead to graphite in pencils
(c) the development of new types of batteries that use lithium instead of lead
(d) new types of lead s crubbers on smok e-stacks that removed lead from the air

Ans: (a)

Q170. The main cause of ozone layer depletion in the upper atmosphere is
(a) SO2
(b) CH4
(c) NOx
(d) NH3

Ans: (c)

Q171. The main chemical responsible for ozone depletion is
(a) PAN
(b) Hydrocarbon
(c) Freon
(d) CFC

Ans: (d)

Q172. The most effective antimalarial strategies involve the use of
(a) DDT, bed nets and quick access to drug treatment
(b) DDT, immunisation and the drainage of all standing water in a region
(c) immunisations, surgery and a change in diet
(d) sterilisation of mosquitoes, treatment of mosquito breeding sites and antibiotics

Ans: (a)

Q173. The most polluted city in the world is
(a) Kolkata
(b) Tokyo
(c) New York
(d) Mexico

Ans: (d)

Q174. The most powerful eye irritant present in the smog is
(a) NO
(b) O3
(c) PAN
(d) SO2

Ans: (c)

Q175. The most widespread negative health impact of air pollution is the
(a) destruction of the cellular components of the immune system
(b) loss of the ability to absorb vital nutrients by the digestive system
(c) disruption of the signalling processes of the endocrine system
(d) chronic stress that weakens many systems of the body

Ans: (d)

Q176. The pesticide that directly attacks the nervous system is
(a) aldrin
(b) DDT
(c) organic phosphates
(d) Both (a) and (c)

Ans: (a)

Q177. The pesticides that also function as endocrine disruptors cause disease by
(a) causing excessive secretion of stomach acids
(b) mimicking the effects of estrogenic hormones
(c) causing muscle spasms and cramping in major muscle groups
(d) greatly reducing the ability of the intestines to absorb nutrients

Ans: (b)

Q178. The recent air pollution due to radiation that causes hazards to the world and disturbed the ecological balance:
(a) MIC gas tragedy in Bhopal
(b) Chernobyl explosion
(c) Challenger explosion in USA
(d) All of the above

Ans: (b)

Q179. The threshold level for harmful effects of toxic pollutants is most closely related to the
(a) first appearance of chronic effects
(b) duration of exposure
(c) concentration of exposure
(d) concentration and duration of exposure

Ans: (d)

Q180. The widespread poisoning of the nervous systems of people living in the fishing village of Minamata, Japan, in the mid-

1950s revealed the toxic consequences of environmental pollution by
(a) lead
(b) mercury
(c) perchlorate
(d) halogenated hydrocarbon

Ans: (b)

Q181. Today the best approach to fighting malaria in developing countries primarily relies on the
(a) widespread application of DDT
(b) use of mosquito nets and DDT
(c) use of mosquito nets but not DDT
(d) antimalarial drugs

Ans: (b)

Q182. Today, one of the continuing threats to the consumption of large quantities of fish and shellfish from around the world is exposure to toxic levels of
(a) lead
(b) mercury
(c) sodium
(d) copper

Ans: (b)

Q183. Toxicants occurring in aquatic ecosystems are highly subjected to biomagnification, meaning
(a) the toxic chemicals specifically target primary producers, disrupting the entire food web
(b) the pollutants occur in higher concentrations in tissues of organisms higher up in the food chain
(c) the pollutants take a long time to break down
(d) the chemicals are converted to more toxic compounds once in the water gLOBAL WARming AnD SUSTAinABiLiTY

Ans: (d)

Q1. In general, the movement toward sustainability is
(a) Declining, as interest in sustainable environmental policy declines
(b) Still a distant philosophical goal of the environmental movement
(c) Faced with growing opposition from economic interests
(d) Growing with greater interest from governments and businesses

Ans: 1. *(d)*

Q2. Additional increases in ocean levels beyond those already expected may be most affected by
(a) Increased evaporation of the oceans
(b) Greater than expected melting of polar ice
(c) Greater than expected melting of ice sheets on Greenland and Antarctica
(d) The formation of additional glaciers in regions where temperatures will decline

Ans: (c)

Q3. As climate change continues, we expect that the countries with the
(a) Largest coastlines will experience the greatest impacts
(b) Greatest resources will experience the greatest impacts
(c) Fewest resources will experience the greatest impacts
(d) Fewest resources will experience the lowest impacts

Ans: (c)

Q4. As global climate change warms certain mountain ranges, the temperature optima for the insect species living on the mountain causes these insects to
(a) Move higher up the mountain
(b) Move down the mountain
(c) Move to a new biome
(d) Become parasitic

Ans: (a)

Q5. Building on scientific research and careful measurements, the 1987 Montreal Protocol represented
(a) Global stewardship to limit the destruction of the ozone
(b) Agreements to maintain sustainable levels of agricultural productivity
(c) Sound science to better understand the impact of acid precipitation

(d) Stewardship by the Canadian government to limit the production of greenhouse gases

Ans: (a)

Q6. Cap-and-trade programmes

(a) Were already in use by the European Union before 2010

(b) Have never been utilised because of their high costs

(c) Were first widely used in the United States for power companies in 1990

(d) Only apply to non -GHG emitting forms of electrical generation

Ans: (a)

Q7. Carbon capture and storage systems are currently

(a) Widely used in power plants that burn oil, natural, gas and coal

(b) Not possible with available technology

(c) Costly and experimental, but promising

(d) Only available for power plants that burn natural gas

Ans: (c)

Q8. Carbon dioxide in the atmosphere contributes to global warming by

(a) Transmitting visible light and absorbing infrared radiation

(b) Transmitting infrared radiation and absorbing visible light

(c) Transmitting infrared radiation and visible light

(d) Absorbing infrared radiation and visible light

Ans: (a)

Q9. Climatologists warn of a tipping point when global temperatures trigger catastrophic events and sea levels rise more than 50 feet. About how much warmer does the world need to get for this tipping point to happen?

(a) 1°C

(b) 3°C

(c) 7°C

(d) 12°C

Ans: (b)

Q10. Compared to 50 years ago, the thinning ozone layer has produced dramatic increases in cases of

(a) Asthma and colour blindness

(b) Cataracts and skin cancer

(c) Vitamin D deficiency and hearing loss

(d) Skin cancer and retinal detachment

Ans: (b)

Q11. Current levels of atmospheric carbon dioxide are

(a) Remaining high but steady

(b) Higher than they have been in 800,000 years

(c) Fluctuating greatly but are starting to increase again after a downward trend in the 1990s

(d) Decreasing because surplus carbon dioxide is being absorbed by the arctic permafrost

Ans: (b)

Q12. Efforts to limit global deforestation should be concentrated

(a) In the northern hemisphere

(b) In the developing regions of the world

(c) Wherever there is the greatest concentration of people

(d) In regions with the highest production of agricultural crops

Ans: (b)

Q13. Evidence from proxies indicate that eight major oscillations in global temperatures over the past 800,000 years are most likely the result of

(a) Rising and falling sea levels that greatly impact photosynthetic activity

(b) Variations in solar activity that produce different levels of radiation

(c) Milankovitch cycles of periodic variations in Earth's orbits around the sun

(d) Lunar cycles in which the moon orbits at different distances from the Earth

Ans: (c)

Q14. For more than 20 years, scientists have been analysing expected climate change and the impact on crops grown in particular regions. For example, states that typically

plant corn and soybeans may need to switch to growing cotton.
Such a change is an e
(a) Mitigation
(b) A cap-and-trade policy
(c) Adaptation
(d) Stabilisation wedge

Ans: (c)

Q15. From 1990 to 2006, what region of the world was able to reduce its GHGs?
(a) United States
(b) European Union
(c) Australia
(d) Canada

Ans: (b)

Q16. If atmospheric carbon dioxide was eliminated from our atmosphere, we would expect that
(a) The Earth would cool considerably and photosynthesis would dramatically increase
(b) The Earth would cool considerably and photosynthesis would dramatically decrease
(c) The Earth would heat up considerably and photosynthesis would dramatically increase
(d) The Earth would heat up considerably and photosynthesis would dramatically decrease
MUltiPle-CHOiCe QUestiOns

Ans: (b)

Q17. If global climate change causes rain and temperature patterns to shift dramatically in a region,
(a) plate tectonic action may dramatically change
(b) ocean levels could suddenly drop
(c) a biome may shift to another type
(d) the Earth may shift on its axis

Ans: (c)

Q18. In 2008, the United States was able to reduce its GHGs from the prior year 2007 level. How did the United States do this?
(a) The recession of 2008 impacted the use of energy
(b) A cap-and-trade programme came into e f-fect
(c) The agreements of the Kyoto Protocols took effect
(d) Hybrid and all electric cars greatly reduced the consumption of gas

Ans: (a)

Q19. In a cap-and-trade programme,
(a) companies that exceed emission caps must agree to do better the following year
(b) a company that does not reach its GHG cap pays taxes at a higher corporate rate
(c) all companies pool their resources and try to stay under a collective cap
(d) a company that does not reach its cap can sell credits to companies that exceed the caps

Ans: (d)

Q20. Most oil is recovered from an oil field
(a) relying on the natural pressure of the sy s-tem
(b) by simply pumping it out of the ground
(c) only after using procedures that first gene r-ate pressure
(d) pumping freshwater into the ground and making the oil float to the top

Ans: (c)

Q21. Our most recent understanding of the formation of ozone requires the reduction of atmospheric levels of
(a) volatile inorganic compounds
(b) carbon monoxide and volatile organic compounds
(c) nitrogen oxides and carbon monoxide
(d) nitrogen oxides and volatile organic co m-pounds

Ans: (d)

Q22. Recent changes in the climate is due to
(a) environmental pollution
(b) different natural phenomenon in recent years
(c) natural cyclic change of climates
(d) chernobyl explosion

Ans: (a)

Q23. Reliance on the continued use of fossil fuels is not sustainable because fossil fuels are

(a) concentrated in countries that are not politically stable
(b) not significant sources of energy and are increasing in cost
(c) not renewable and contribute to global climate change
(d) not renewable and are primarily from politically unstable regions

Ans: (c)

Q24. Rising greenhouse gases (GHGs) in the twenty-first century most confidently predict
(a) increases in global temperatures and sea levels
(b) decreases in polar temperatures but increases in sea levels
(c) decreases in sea levels but increases in polar temperatures
(d) increases in ocean pH and increases in sea levels

Ans: (a)

Q25. The 2007 Assessment Report concluded that global climate change is caused at least in part by the
(a) human use of fossil fuels to generate electricity and power engines
(b) human use of chlorofluorocarbons in refrigeration systems
(c) harvesting of millions of acres of corn, wheat and soybeans around the world every year
(d) depletion of groundwater supplies

Ans: (a)

Q26. The 2007 report of the Panel on Climate Change reported that global climate change is
(a) certain and it is very likely that humans are to blame
(b) likely and it is possible that humans are to blame
(c) happening in some regions of the world and in some places people may be to blame
(d) still unclear and the evidence and the causes of change require additional studies

Ans: (a)

Q27. The best computer models of global climate change indicate that in the next 50 years,
(a) all of the rain forests will be destroyed
(b) growing seasons will get shorter
(c) the world will warm up by 2–3°C
(d) regions of drought will instead experience flooding

Ans: (c)

Q28. The best way to sustainably manage natural environments is to
(a) maintain the interactions between the members of the ecosystem
(b) stop hunting animals and harvesting the fruits of the plants in the ecosystem
(c) minimise the impact of natural disasters, such as fires and storms
(d) carefully limit the growth of the major carnivores and herbivores in the ecosystem

Ans: (a)

Q29. The concept of sustainable development emphasises
(a) the needs of future generations
(b) trade between all nations of the world
(c) the importance of developing the arts
(d) the fastest ways to economic prosperity

Ans: (a)

Q30. The decline of the polar ice caps because of increasing temperatures at the poles will
(a) increase the amount of freshwater available for human use
(b) decrease the largest reserve of freshwater on Earth
(c) increase the amount of freshwater available in aquifers
(d) decrease global sea levels

Ans: (b)

Q31. The destruction of the ozone layer primarily occurs in the
(a) mesosphere
(b) thermosphere
(c) stratosphere
(d) troposphere

Ans: (c)

Q32. The developed countries of the world have contributed the most to global climate change. By applying the polluter pays and equity principles, we would expect that the
(a) developed countries will provide funds for adaptations in the developing countries
(b) developing countries will provide funds for adaptations in the developed countries
(c) precautionary principle will guide the pa y-ment of compensation to developed countries
(d) stabilisation wedge approach to global cl i-mate change will help to equalise the funds for adaptations

Ans: (a)

Q33. The greatest stratospheric thinning of the ozone layer would be expected in
(a) July in the Antarctic
(b) January in the Antarctic
(c) July at the equator
(d) January in the Arctic

Ans: (a)

Q34. The impact of global warming on the water cycle is expected to produce
(a) more precipitation
(b) fewer droughts
(c) fewer hurricanes
(d) greater agricultural productivity in curren t-ly water-stressed regions

Ans: (a)

Q35. The inside of a car or greenhouse would not heat up as much in the presence of sunshine if
(a) air was circulated within the car or within the greenhouse
(b) infrared radiation passed through glass as easily as sunlight
(c) infrared radiation could not pass through glass as easily as sunlight
(d) sunlight could pass through glass more ea s-ily than through air

Ans: (b)

Q36. The main cause of global warming is
(a) trapping of high wavelengths of sunrays by SO2
(b) trapping of shorter wavelengths of sunrays by CO2
(c) trapping of longer wavelengths of sunrays by CO2
(d) all of the above

Ans: (d)

Q37. The main human activities that have raised atmospheric carbon dioxide levels are
(a) deforestation and burning fossil fuels
(b) home development on grasslands and we t-lands
(c) succession and adaptive radiation
(d) drainage of wetlands areas along rivers and oceans

Ans: (a)

Q38. The major effect of global warming is
(a) animals will die
(b) aquatic plants will die
(c) crop production and yield will be increased
(d) glaciers will melt and water level on earth will increase

Ans: (d)

Q39. The most dramatic temperature shifts in the past few decades have been
(a) on land near the equator
(b) in the oceans nearest the equator
(c) in the north and south polar regions
(d) in the innermost regions of the North American and African continents

Ans: (c)

Q40. The most effective way to reduce GHG emissions is to increase
(a) the production of electric cars
(b) energy efficiency and renewable energy
(c) our reliance on widely available natural gas resources
(d) the use of coal gasification plants and scrubber technologies to reduce sulphur emi s-sions

Ans: (b)

Q41. The most sustainable way to drive a car would be to use
(a) an all electric car using electricity from a windmill

(b) an all electric car using electricity from any power supply
(c) a hydrogen fuel cell using hydrogen pr o-duced by a nuclear power plant
(d) a hybrid electric car that generates electricity when slowing down

Ans: (a)

Q42. The negative impacts of ozone pollution on forests are expected to increase as
(a) ocean levels rise and wind patterns shift
(b) organisms spread northward because of warming climate conditions
(c) the increasing demand for timber further stresses the growth of trees
(d) temperatures increase and precipitation becomes more unpredictable

Ans: (d)

Q43. The ozone layer can be destroyed by pollutants such as
(a) halons and CFCs
(b) sulphur dioxide
(c) carbon monoxide
(d) hydrocarbons and nitrogen oxides

Ans: (d)

Q44. The stabilisation wedge approach attempts to
(a) reduce carbon emissions to 1950 levels by the year 2020
(b) use multiple mitigation methods to stabilise carbon emissions at 2005 levels by 2055
(c) eliminate the use of personal gasoline veh i-cles in all developed countries by the year 2055
(d) address rising carbon emissions by requi r-ing nuclear power and cap-and-trade methods for all developed countries WORLD WATER RESOURCES

Ans: (b)

Q45. Compared to near -shore aquaculture, open ocean aquaculture
(a) is more polluted
(b) has higher concentrations of pathogens
(c) is restricted to carnivorous species.
(d) has less competition from other activities

Ans: (d)

Q46. Deep underground reservoirs of water are called
(a) eutrophic zones
(b) aquifers
(c) non-phototrophic zones
(d) seismic buffers

Ans: (b)

Q47. Freshwater becomes polluted
(a) by oil spills in ocean water moving inland
(b) primarily by contaminants from aquifers moving to surface waters
(c) as a result of eutrophication
(d) from runoff associated with urban areas chemicals used in farming in rural areas

Ans: (d)

Q48. Groundwat er as a water source may be better than surface water because
(a) groundwater may be naturally purified by percolation through soil
(b) groundwater is a self -replenishing resource that cannot be exhausted
(c) surface water is not naturally selfreplenis h-ing
(d) groundwater is more easily located than surface water

Ans: (a)

Q49. How has converting grasslands to plowed land changed the streams and rivers in the affected watersheds?
(a) Flooding has decreased
(b) Fertilisers are more likely absorbed into the soil
(c) The water table has been lifted
(d) Water flow has increased

Ans: (d)

Q50. If an owl is moved from a mature evergreen forest to mature hedge row in a suburban neighbourhood, the owl's _____ has been changed.
(a) range
(b) environmental resistance
(c) habitat
(d) biosphere

Ans: (c)

Q51. If water is depleted from an aquifer faster than the recharge rate,
(a) the water table will rise
(b) surface water will stop percolating dow n-wards
(c) wetlands will flood
(d) sinkholes may form

Ans: (d)

Q52. In developing countries, contaminated water is responsible for the deaths of more than 1.6 million people.
Contributing to this problem is the use of
(a) groundwater for consumption and the i m-proper disposal of human sewage
(b) groundwater for consumption and the di s-posal of human sewage in surface waters
(c) surface waters for consumption and the disposal of human sewage
(d) surface waters for consumption and the disposal of human sewage in groundwater

Ans: (c)

Q53. In many parts of the world, human activities cause depletion of water in rivers and lakes. In those regions, which of the fo l-lowing would most likely help?
(a) Construct desalination plants to generate drinking water
(b) Switch to windmills and solar panels to generate electricity
(c) Switch to agricultural products that require less water
(d) Increase the use of railways to move agr i-cultural products and coal

Ans: (c)

Q54. Lakes severely impacted by acidifica-tion will most likely
(a) be clear and blue, but with few fish or other animals
(b) be dark, muddy and full of crustaceans and the larvae of insects
(c) have abundant surface vegetation and many insects but few fish
(d) be reddish in colour due to the dissolved iron from nearby soils

Ans: (a)

Q55. Lakes that suffer from environmental acidification typically have
(a) fewer animals and higher levels of heavy metals
(b) more animals and lower levels of heavy metals
(c) more plants, fewer animals and slightly higher levels of heavy metals
(d) fewer plants, more animals and slightly lower levels of heavy metals

Ans: (a)

Q56. Most of the water on Earth is found in
(a) lakes and rivers
(b) polar ice caps
(c) glaciers
(d) oceans

Ans: (d)

Q57. The greatest threats to groundwater supplies are
(a) groundwater pollution and depletion
(b) global warming and the construction of dams
(c) increased evaporation and increased preci p-itation
(d) evapotranspiration and runoff

Ans: (a)

Q58. The greatest worldwide use of water is for
(a) irrigation
(b) industry
(c) human consumption
(d) washing and flushing toilets

Ans: (a)

Q59. The largest reserves of freshwater on Earth are found in
(a) lakes and wetlands
(b) rivers and groundwater
(c) aquifers
(d) polar ice caps and glaciers INTRODU C-TION

Ans: (d)

Q1. Although unusually high, extinction rates may be

(a) Declining because of overestimates of some groups in some ecosystems
(b) Declining because fewer species are b e-coming threatened worldwide
(c) Even higher because of the loss of tropical forests
(d) Even higher because of intense predation in many grassland ecosystems

Ans: (c)

Q2. Biodiversity hotspots are also known as
(a) Evergreen forests of tropic region
(b) Biologically rich areas with large percen t-age in endemic species
(c) Deserts areas
(d) All of the above

Ans: (d)

Q3. Biodiversity in the world is
(a) Declining and is most negatively impacting the poorest people of the world
(b) Declining and is most negatively impacting the wealthiest people of the world
(c) Increasing but is negatively impacting the poorest people of the world
(d) Increasing but is negatively impacting the wealthiest people of the world

Ans: (a)

Q4. Biodiversity is important because
(a) It is necessary to maintain ecosystems
(b) Humans can use new sources of food
(c) Without certain species, photosynthesis may not be possible
(d) Certain species are necessary to provide oxygen in the atmosphere

Ans: (a)

Q5. Compared to forests using sustainable forest management, commercial forests managed for maximum sustainable yield of commercially valuable species will
(a) Support more biological diversity
(b) Be more resistant to pests
(c) Produce a greater variety of wood
(d) Have greater erosion problems

Ans: (d)

Q6. Globalisation has helped to address which of the following problems?
(a) The dispersion of exotic species to new locations in the world
(b) The spread of infectious organisms
(c) The challenges of producing enough food for the people of the world
(d) Global climate change

Ans: (c)

Q7. The major threats to biodiversity is due to
(a) Habitat loss/degradation
(b) Extinction of species by aggressive non - native species
(c) Climate change and pollutions
(d) All of the above

Ans: (d)

Q8. Loss of biodiversity around the world threatens the existence of the human popu-lation as well since humans depend on other species for
(a) Medicine
(b) Food
(c) Oxygen
(d) All of the above

Ans: (d)

Q9. Protection of biodiversity around the world requires
(a) Basic science to produce government pol i-cies and laws that then must be enforced
(b) Changes to social structure and political organisations that drive basic science
(c) New technologies and techniques that are still being developed
(d) The introduction of new species into new regions to spread a species range

Ans: (a)

Q10. Protection of endangered species by preserving the entire ecosystem is known as
(a) In situ conservation
(b) Ex situ conservation
(c) Biodiversity conservation
(d) None of the above

Ans: (a)

Q11. Species with very restricted distribution over relatively small ranges is called
(a) Endangered species
(b) Extinct species
(c) Endemic species
(d) None of the above

Ans: (c)

Q12. The concept of biodiversity hotspots is given by
(a) F.P. Odum
(b) Norman Myers
(c) James Lovelock
(d) Rachel Carson

Ans: (b)

Q13. The concept of biological fitness is based on two separate abilities. These are the ability to
(a) Survive and reproduce
(b) Find a mate and have offspring
(c) Defend against enemies and find food
(d) Produce and defend a family

Ans: (b)

Q14. The greatest loss of biodiversity in the last two centuries has resulted from:
(a) The introduction of alien species to new ecosystems
(b) The use of fossil fuels to power transport ation and electrical production
(c) The physical alteration of habitats
(d) The use of rivers, lakes and oceans for transportation

Ans: (c)

Q15. The greatest threat to global biodiversity is
(a) The introduction of alien species
(b) Habitat destruction
(c) Overconsumption of rice, corn and wheat
(d) The spread of viral diseases throughout the world

Ans: (b)

Q16. The loss of biodiversity most severely affects
(a) Developed nations of the world
(b) The wealthiest people in the world
(c) The poorest people in developing nations
(d) The production of food in the developed world

Ans: (c)

Q17. The main instrumental value of biological diversity is the
(a) Ability of organisms to respond to fluctu ations in their natural environments
(b) Ability of natural ecosystems to respond to natural disasters
(c) Joy that humans gain from the beauty of nature.
(d) The potential for new types of domestica ted animals and plants.

Ans: (d)

Q18. The variety and the numbers of living organisms present in an ecosystem is called
(a) Biodiversity
(b) Biopiracy
(c) Biogeography
(d) Bioprospecting ENDANGERED SPECIES

Ans: (b)

Q19. Endemic species are
(a) Secure groups that show the least risk of extinction
(b) Limited to just one habitat
(c) Widely distributed, found especially on large continents
(d) Usually the dominant species within an ecosystem

Ans: (b)

Q20. Most species in the world go extinct because
(a) Of new diseases spread by human contact
(b) Humans harvest them or kill them as pests
MUITIPIE-CHOICE QUESTIOnS
(c) of loss of habitat
(d) global climate change is causing their env ironments to rapidly change

Ans: (c)

Q21. One challenge to the protection of endangered animal species from overexploitation for commercial purposes is that as a species becomes increasingly rare,

(a) the laws protecting that species tend to b e-come even more restrictive
(b) the price of illegal animal products increa s-es
(c) it is more difficult for poachers to c apture the animal
(d) fewer poachers may search for the enda n-gered animal

Ans: (b)

Q22. Over the past 20 years, vultures in I ndia and Pakistan have declined by more than 95 per cent due to
(a) increased hunting and fear from villagers that the vultures will kill their domestic cattle
(b) the destruction of their nesting habitat in cliffs bordering the Indus River
(c) the spread of respiratory viruses common in domestic chickens
(d) the widespread use of an antiinflammatory drug in cattle that were eaten by vultures

Ans: (d)

Q23. Protection and preservation of endan-gered species away from their natural habi-tat under human care in zoos, nurseries and laboratories is known as
(a) in situ conservation
(b) ex situ conservation
(c) biodiversity conservation
(d) none of the above

Ans: (d)

Q24. Sumatran rhino populations have de-clined steadily to a point near extinction. Because of its population decline, this un u-sual forest-dwelling rhino is near its
(a) carrying capacity and is officially listed as threatened
(b) carrying capacity and is officially listed as endangered
(c) critical number and is officially listed as threatened
(d) critical number and is officially listed as endangered

Ans: (d)

Q25. The acronym HIPPO identifies the five major factors contributing to extinction to-day. These are
(a) humans, invasive species, periodic climate changes, pollution and overexploitation
(b) hunting, immigration, people, population and outsourcing
(c) housing, immigration, people, pollution and overproduction
(d) habitat destruction, invasive species, poll u-tion, population and overexploitation

Ans: (d)

Q26. The species that are most vulnerable to extinction are those, which are
(a) endemic and limited to a single population
(b) endemic and widespread in several large regions
(c) genetically diverse and found in many r e-gions
(d) widespread but are not dominant in an ec o-system

Ans: (a)

Q27. Threatened and endangered species receive special protection from human ac-tivities such as hunting and habitat destruc-tion because these activities
(a) are density independent
(b) are density dependent
(c) represent bottom–up regulation
(d) represent harmful abiotic resistance HAB I-TATS IN DANGER

Ans: (a)

Q28. Using an organism's natural social characteristics to return a species to parts of its native range is a conservation strategy called
(a) behavioural preservation
(b) community integration
(c) social attraction
(d) social investment strategy

Ans: (c)

Q29. Compared to the long -term historical average rate of extinction, extinction rates today are
(a) lower

(b) about the same
(c) higher
(d) changing from higher to lower rates in the past century

Ans: (c)

Q30. Humans have contributed to habitat destruction by
(a) clearing land and use of chemicals for farming
(b) producing greenhouse gases through use of fossil fuels
(c) exploitation of land and water for mining of scarce resources
(d) all of the above

Ans: (d)

Q31. The fragmentation of natural habitats in the conversion of land for human uses creates
(a) more opportunities to preserve wildlife in many small parks
(b) focused regions where careful wildlife management can actually increase biodiversity
(c) habitats that favour species that grow slo w-ly or have naturally unstable populations
(d) breaks that favour species that thrive at the edges of ecosystems NATURAL VEG ETA-TION AND BIODIVERSITY

Ans: (d)

Q1. In the Lower Himalayan Mountains, several species of salamander, an amphibi-an, live in or near a stream.
The largest species lives in the stream and along its edges, a smaller species lives on land within a meter or two of the stream, and an even smal
(a) Different niches within the same habitat.
(b) The same niche and microhabitat.
(c) The same landscape but different ecosy s-tems.
(d) The same habitat but different niches.

Ans: (a)

Q2. India is a mega diversity country with
(a) Four ecological hotspots.
(b) Three ecological hotspots.
(c) Two ecological hotspots.
(d) One ecological hotspot.

Ans: (b)

Q3. The endangered species Brown Palm civet (Paradoxurus jerdoni) is found in
(a) The Western Ghats.
(b) The Eastern Ghats.
(c) The Eastern Himalayas.
(d) The Sundarbans.

Ans: (a)

Q1. Identify the ecosystem that has the lo w-est net primary production per square m e-ter.
(a) A coral reef
(b) An open ocean
(c) A grassland
(d) A Tundra region

Ans: (b)

Q2. The rate of energy at consumer's level is known as:
(a) Net primary productivity
(b) Total primary productivity
(c) Primary productivity
(d) Productivity

Ans: (a)

Q3. Through which of the following does a chemical element or molecule moves in bi o-geochemical cycle?
(a) Biosphere and lithosphere
(b) Lithosphere and atmosphere
(c) Biosphere, lithosphere and atmosphere
(d) Biosphere, lithosphere, atmosphere and hydrosphere

Ans: (d)

Q4. Which is NOT an external factor to con-trol an ecosystem?
(a) Altitude
(b) Microbes
(c) Type of soil
(d) Topography

Ans: (b)

Q5. Identify the correct food chain.
(a) Phytoplankton → Zooplankton → Turtle → Crabs

(b) Turtle → Crab → Zooplankton → Phytoplankton
(c) Phytoplankton → Zooplankton → Crab → Turtle
(d) Zooplankton → Turtle → Crab → Phytoplankton

Ans: (c)

Q6. Which is NOT an internal factor of an ecosystem?
(a) Bedrock
(b) Decomposition
(c) Root competition
(d) Succession

Ans: (a)

Q7. Approximately what percentage of NPP ends up broken down by decomposers in terrestrial ecosystems?
(a) 80%
(b) 90%
(c) 60%
(d) 40%

Ans: (b)

Q8. Assertion (A): The overall structure of an ecosystem and its internal functioning is controlled by state factors (external factors).
Reason (R): The state factors are not t affected by the ecosystem.
Identify the correct code:
(a) (A) is correct (R) is incorrect.
(b) Both (A) and (R) are correct, but (R) is not correct explanation of (A).
(c) Both (A) and (R) are correct and (R) is correct explanation of (A).
(d) Both (A) and (R) are incorrect.

Ans: (b)

Q9. Assertion (A): The construction of dams damages the ecosystem surrounding a river.
Reason (R): The surrounding area gets su b-merged under large volume of water.
Identify the correct answer:
(a) Both (A) and (R) are true, with (R) being the correct explanation.
(b) Both (A) and (R) are true, but (R) is not the correct explanation.
(c) (A) is true, but (R) is wrong.
(d) Both (A) and (R) are wrong.

Ans: (b)

Q10. Assertion (A): Nitrogen cycle is an e n-dogenic biogeochemical cycle.
Reason (R): Atmospheric N2 can be fixed by certain prokaryotes in the soil.
Choose correct answer:
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

Ans: (d)

Q11. Which of the following is not a major biome of India?
(a) Tropical rain forest biomes
(b) Mountains and glaciers
(c) Tropical deciduous forest biomes
(d) Temperate needle leaf forest biomes

Ans: (b)

Q12. Identify the correct food chain.
(a) Krill → Crabeater Seal → Killer Whale → Leopard Seal
(b) Krill → Adelie Penguins → Emperor Penguins → Leopard Seal
(c) Krill → Leopard Seal → Emperor Penguins → Killer Whale
(d) Krill → Crabeater Seal → Leopard Seal → Killer Whale

Ans: (d)

Q13. It is not possible to invert the following pyramid in a stable ecosystem. Identify the type of pyramid.
(a) Pyramid of biomass
(b) Pyramid of number
(c) Pyramid of energy
(d) Pyramid of dry weight

Ans: (c)

Q14. Which of the following belong to a lotic ecosystem?
(a) Bog ecosystem
(b) Wetland ecosystem
(c) Stream ecosystem

(d) Pond ecosystem

Ans: (c)

Q15. Which type of pyramid is always straight?
(a) Pyramid of number and biomass
(b) Pyramid of energy
(c) Pyramid of number
(d) Pyramid of biomass

Ans: (b)

Q16. Which of the following regions is not an Atmospheric Brown Cloud (ABC) hotspot?
(a) Amazon Basin
(b) Australia
(c) East-Asia
(d) South Africa

Ans: (b)

Q17. Assertion (A): In an ecosystem, flow of energy follows the law of thermodynamics.
Reason (R): In an ecosystem, the flow of energy is unidirectional and during the transformation of energy from one trophic level to the other, 80–90 per cent of energy
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

Ans: (a)

Q18. Match the List I (Vegetation Development) and List II
(Nomenclature of succession) using the given codes.
List I List II
A. On a rock i. Hydrosere
B. On sand ii. Xerosere
C. In aquatic habitat iii. Psammosere
D. In dry habitat iv. Lithosere Codes:
A
(a) ii i iv iii
(b) i ii iii iv
(c) iii iv ii i
(d) iv iii i ii

Ans: (d)

Q19. What is the major feature of Limnetic zone in freshwater ecosystem?
(a) There is an absence of rooted vegetation
(b) There is a presence of rooted vegetation
(c) There is an absence of phytoplankton
(d) There is a presence of large proportion of lime

Ans: (a)

Q20. In which region of electromagnetic radiation spectrum, the vegetation cover shows greatest reflectance?
(a) Near infrared
(b) Ultraviolet
(c) Visible
(d) Middle infrared

Ans: (a)

Q21. Which of the following factors determine the spectral reflection of vegetation over electromagnetic radiation spectrum during remote sensing of the vegetation cover?
(a) Pigmentation in the leaf
(b) Structure of the leaf
(c) Moisture content of the leaf
(d) All the above characters

Ans: (d)

Q22. Which of the following statements regarding biogeochemical cycles are correct?
(i) Ecosystems are just like black boxes for many of the processes that take place within them.
(ii) Ecosystem boundaries are permeable to some extent or other.
(iii) The
(a) (i) and (ii) only
(b) (ii) and (iii) only
(c) (i) and (iii) only
(d) (i), (ii) and (iii)

Ans: (d)

Q23. Assertion (A): Estuaries are a form of productive ecosystems.
Reason (R): Great amounts of nutrients are brought into the basin by the rivers.
Choose the correct answer:

(a) Both (A) and (R) are true, and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true and (R) is false.
(d) (A) is false and (R) is true.

Ans: (a)

Q24. Identify the organic compound which is NOT of biogenic origin?
(a) Acrolein
(b) Isoprene
(c) Myrcene
(d) a -pinene

Ans: (a)

Q25. What do we call the individuals of a plant species found in a specific region?
(a) Flora
(b) Population
(c) Flora and fauna
(d) Fauna

Ans: (b)

Q26. What do we call the whole series of communities of biotic succession from pi oneer to climax?
(a) Biome
(b) Population
(c) Sere
(d) Troph

Ans: (c)

Q27. Identify the ecosystems in which the pyramid of biomass is inverted.
(a) Pond
(b) Forest
(c) Desert
(d) Grassland

Ans: (a)

Q28. Which of the following contained in a biome?
(a) Many populations
(b) Many communities
(c) Many ecosystems
(d) A single ecosystem

Ans: (c)

Q29. Which of the following is the most to xic form of mercury in water?
(a) H3C–Hg+
(b) Hg2+
(c) 2Hg+
(d) Hgo

Ans: (a)

Q30. Which of the following has NOT been included in Millennium Development Goals?
(a) Attaining universal energy security
(b) Elimination the conditions of extreme po verty and hunger
(c) Creating global partnership for develo p ment
(d) Environmental sustainability

Ans: (a)

Q31. What is the global warming potential of methane when compared to CO2?
(a) 15–20 times more
(b) 30–35 times more
(c) 20–25 times more
(d) 50–55 times more

Ans: (c)

Q32. What will be expected rise in sea water level if the Polar ice melts down?
(a) Approximately 100 metre
(b) Approximately 60 metre
(c) Approximately 50 metre
(d) Approximately 30 metre

Ans: (b)

Q33. In which month of the year does the El Nino reappear after disappearing in March?
(a) June
(b) September
(c) November
(d) December

Ans: (d)

Q34. By how many years was the term of Kyoto Protocol extended after December 2012?
(a) 7 years
(b) 5 years

(c) 9 years
(d) 2 years

Ans: (b)

Q35. Which one of the following is not a factor of climate change?
(a) HFCs
(b) NO
(c) O3
(d) SF6

Ans: (b)

Q36. Which of the following has warming effect on the atmosphere but cooling effect on the surface of the earth?
(a) Greenhouse gases
(b) Sulphates and nitrates
(c) Ozone
(d) Black carbon aerosols

Ans: (d)

Q37. Assertion (A): Chlorofluorocarbons adversely affect ozone.
Reason (R): Chlorine, bromine and fluorine are included in these compounds.
Codes:
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true

Ans: (c)

Q38. Which of the following is a way to express specific mortality of members of a population?
(a) Life table
(b) Rate of mortality
(c) Survivorship curve
(d) Rate of fecundity

Ans: (c)

Q39. Which group of vertebrate has the greatest number of endangered species?
(a) Fish
(b) Birds
(c) Reptiles
(d) Amphibia

Ans: (d)

Q40. The diversity of species increases as we move from:
(a) Lower to higher altitude and lower to higher latitude
(b) Lower to higher altitude and higher to lower latitude
(c) Higher to lower altitude and higher to lower latitude
(d) Higher to lower altitude and lower to higher latitude

Ans: (c)

Q41. In what way do the species of Keystone predator maintain diversity in a community?
(a) By allowing inclusion of other predators
(b) By excluding other predators
(c) By coevolving with their prey
(d) By preying on dominant species of the community

Ans: (d)

Q42. Which of the following nutritionally limits freshwater ecosystems?
(a) Iron and Nitrogen
(b) Phosphorous and Carbon
(c) Nitrogen and Calcium
(d) Phosphorous and Iron

Ans: (d)

Q43. 'Threshold of Security' is the level of the population at which
(a) The host body is damaged by parasites but it does not lead to its mortality.
(b) Functional response of the predator is great.
(c) Predators do not find it profitable to hunt for the prey species.
(d) The balance between parasite and host is disturbed.

Ans: (c)

Q44. Which of the following areas are „Hot spots'?
(i) Aras scarce in species
(ii) Areas with high endemism
(iii) Areas rich in species

(iv) Areas under constant threat
(a) *(i)* and (ii)
(b) (ii) and (iii)
(c) (ii), (iii) and (iv)
(d) *(i)*, (ii) and (iv)

Ans: (c)

Q45. To what does the rate of replacement of species along a gradient of habitats pe r-tain?
(a) Gamma diversity
(b) Species diversity
(c) Alpha diversity
(d) Beta diversity

Ans: (d)

Q46. Which of the following is NOT an I n-dian IUCN-designated threatened species?
(a) Asiatic Lion
(b) Mountain gorilla
(c) Indian White rumped vulture
(d) Bengal Tiger

Ans: (b)

Q47. To which of the following categories do spotted deer, Asiatic wild ass, Black buck belong?
(a) Threatened species
(b) Endangered species
(c) Vulnerable species
(d) Key species

Ans: (c)

Q48. From which of the following does the Stockholm Convention, a global treaty, aims to protect humans?
(a) From poisonous gases
(b) persistent organic pollutants
(c) From infections acquired from hospitals
(d) Ultraviolet rays

Ans: (b)

Q49. What is the term used for the process of establishment of a species in a new area?
(a) Ecesis
(b) Aggregation
(c) Stabilization
(d) Migration

Ans: (a)

Q50. What is the term used for the process in which top fertile is removed by water?
(a) Weathering of soil
(b) Soil erosion
(c) Leaching
(d) Siltation

Ans: (b)

Q51. Which of the following pair is correc t-ly matched?
(a) Savanna—cool temperature year -round, uniform precipitation during the year
(b) Tundra—lengthy summers, mild winters
(c) Tropical forests —almost constant day length and temperature
(d) Temperate grasslands —comparatively short growing season, mild winters

Ans: (c)

Q52. Anthropogenic activities cause:
(a) Collapse of carboniferous rain forest
(b) Extinction of Permian—Triassic extinction
(c) Extinction of Cretaceous Palaeogene e x-tinction
(d) Extinction of Holocene extinction

Ans: (d)

Q53. Which term is used for the species when individuals of the species remain alive only in captivity or other human controlled conditions?
(a) Anthropogenic extinct
(b) Mass extinct
(c) Ecologically extinct
(d) Wild extinct

Ans: (d)

Q54. Arrange the following group of endem-ic vertebrate species of India on the basis of their numbers in a sequence from greater to lesser.
(i) Mammals
(ii) Birds
(iii) Reptiles
(iv) Amphibians Choose the correct answer from the following:
(a) Amphibians, Reptiles, Birds and Mammals.
(b) Mammals, Birds, Amphibians and Reptiles.

(c) Reptiles, Amphibians, Birds and Mammals.
(d) Birds, Mammals, Reptiles and Amphibians

Ans: (c)

Q55. In which of the following states is peaty soil found the most?
(a) Bihar
(b) Kerala
(c) Madhya Pradesh
(d) Gujarat

Ans: (b)

Q56. What is Brown forest soil called?
(a) Mollisols
(b) Spodosols
(c) Altisols
(d) Entisols

Ans: (d)

Q57. In which of the following woodlands are the areas of Chaparral, Maquis, Enicinous, Melleseab located?
(a) Temperate deciduous woodland
(b) Tropical evergreen woodland
(c) Tropical deciduous woodland
(d) Temperate evergreen woodland

Ans: (b)

Q58. What does the term Pleistocene represent?
(a) A period of cold climate
(b) A period of warm climate
(c) Alteration of cold and warm climate with very high proportion of warm period
(d) Alteration of cold and warm climate with high proportion of cold period

Ans: (d)

Q59. From which of the following regions there has been a report of positive mass balance of glaciers?
(a) Lower Himalayas
(b) Karakoram
(c) Nepal Himalayas
(d) Western Himalayas

Ans: (b)

Q60. Which of the following assist in the conception, development and management of Bioparks with a goal of conservation of biodiversity.
(i) Promoting local community welfare without harming the natural habitat.
(ii) Developing educational and scientific
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (i) and (iii)
(d) (i), (ii) and (iii)

Ans: (a)

Q61. With which of the following species is Dachigam sanctuary associated?
(a) Tiger
(b) Rhinoceros
(c) Wild ass
(d) Hangul

Ans: (d)

Q62. Which of the following region is the highest seismic domain in India?
(a) The Deccan Plateau
(b) The Western Ghats
(c) The Indo-Gangetic plains
(d) The Himalayas

Ans: (d)

Q63. Which of the following is the first National Park established in India?
(a) Kanha National Park
(b) Gir National Park
(c) Hazaribagh National Park
(d) The Jim Corbett National Park

Ans: (d)

Q64. What is the climate sensitivity parameter?
(a) The rate of change of surface temperature with albedo of earth
(b) The rate of change of surface temperature with CO2 concentration in atmosphere
(c) The rate of change of precipitation with earth's temperature
(d) The rate of change of surface temperature with radiative forcing.

Ans: (d)

Q65. Match List I (Convention) with List II (Year) using the given codes.

List I List II
A. Convention for the protection of the ozone layer
i. 1982
B. Conservation of migratory species of wild animals
ii. 1985
C. Kyoto protocol iii. 1997
D. UN Convention
(a) ii i iv iii
(b) ii iv iii i
(c) iii i iii iv
(d) i ii iii iv

Ans: (b)

Q66. What is the percentage of chlorine in total dissolved matter in marine water?
(a) 55%
(b) 35%
(c) 42%
(d) 16%

Ans: (a)

Q67. Which of the following has maximum carbon in the world?
(a) Coal mines
(b) Oceans
(c) Antarctica
(d) Forests

Ans: (b)

Q68. Assertion *(A)*: Marine biodiversity is greatest in mid -latitudes in all oceans and along coasts in the Western Pacific.
Reason *(R)*: Sea surface along coasts in the Western Pacific experience highest temper atures.
(a) Both *(A)* and *(R)* are true and *(R)* is the correct explanation of *(A)*.
(b) Both *(A)* and *(R)* are true, but *(R)* is not the correct explanation of *(A)*.
(c) *(A)* is true, but *(R)* is false.
(d) *(A)* is false, but *(R)* is true.

Ans: (a)

Q69. Identify the aquatic ecosystem which is not based on salinity levels?
(a) Brackish ecosystem
(b) Marine ecosystem
(c) Stagnant water ecosystem
(d) Freshwater ecosystem

Ans: (c)

Q70. What is Algal biofertilizer made up of?
(a) Blue green algae and Azolla
(b) Algal biomass and Mycorrhiza
(c) Blue green algae and earthworm
(d) Green algae and Rhizobia

Ans: (a)

Q71. Which of the following soil type is best for agriculture?
(a) Serpent soil
(b) Podozols
(c) Latosols
(d) Solonachak

Ans: (c)

Q72. What does Laterite represent?
(a) Black cotton soil
(b) Regolith soil
(c) Glacial soil
(d) Red soil

Ans: (b)

Q73. Which of the following is NOT the o bjective of sustainable farming in India?
(a) Sustaining fertility of top soil
(b) Practicing mechanised farming
(c) Reducing the use of chemical fertilizer and pesticides
(d) Keep farms economically viable

Ans: (b)

Q74. Assertion *(A)*: Clay soil has high co nc entration of organic matter.
Reason *(R)*: Clay soils have low decompos ition rates.
Identify the correct answer:
(a) Both statements are correct and *(R)* is correct explanation of *(A)*.
(b) Both statements are correct, but *(R)* is not correct explanation of *(A)*.
(c) Statement *(A)* is correct, but *(R)* is incorrect.
(d) Statement *(A)* is incorrect, but *(R)* is correct.

Ans: (a)

Q75. Which of the following types of ecosy s-tem is a paddy field?
(a) Engineered ecosystem
(b) Auto ecosystem
(c) Terrestrial ecosystem
(d) Fresh water ecosystem

Ans: (a)

Q76. What is the period of monsoon in I n-dia?
(a) June to September
(b) November to January
(c) September to December
(d) March to May

Ans: (a)

Q77. The method of 'Double digging' is used in:
(a) Aforestation
(b) Deforestation
(c) Bio-intensive agriculture
(d) Water conservation

Ans: (c)

Q78. Identify the organism which is a free living nitrogen fixer.
(a) Azotobacter
(b) Frankia
(c) Rhizobium
(d) Dorylimes

Ans: (a)

Q79. In which year was Basal convention on Trans boundary movement of hazardous waste implemented?
(a) 1959
(b) 1969
(c) 1979
(d) 1989

Ans: (d)

Q80. What is the point of stress of National Land Reform Policy?
(a) Re-establishment of ecological zones
(b) Regeneration of natural wealth
(c) Watershed system
(d) Tenancy reforms

Ans: (d)

Q81. In what way is risk assessment diffe r-ent from Environmental Impact Asses s-ment?
(a) In terms of hazard location
(b) In terms of probability expression
(c) In terms of disaster management
(d) In terms of human environment

Ans: (b)

Q82. Identify a non-formal environment education and awareness programme amongst the given options.
(a) National Environment Awareness Ca m-paign.
(b) National Environmental appreciation courses.
(c) Environmental Education in school system.
(d) Environmental Management Bus iness Studies

Ans: (a)

Q83. In which year was Public Liability I n-surance Act enacted?
(a) 1996
(b) 1998
(c) 1991
(d) 1988

Ans: (c)

Q84. Match List I (Acts) with List II (Year of enactment) using the given codes.
List I
(Acts) List II
(Year when enacted)
A. Wildlife Protection Act i. 1974
B. Forest Conservation Act ii. 1981
C. Air (Prevention and Control of Pollution) Act
iii. 1980
D.
(a) ii i iv iii
(b) i ii iii iv
(c) iii ii i iv
(d) iv iii ii i

Ans: (d)

Q85. In which of the following year was Hazardous Waste Management and Ha n-dling Rule enacted?
(a) 1979
(b) 1989
(c) 1999
(d) 1969

Ans: (b)

Q86. What is the share of renewable energy in the total energy generation in India?
(a) ~ 1–3%
(b) ~ 11–12%
(c) ~ 18–20%
(d) ~ 27–30%

Ans: (b)

Q87. In which year was Environmental Protection Act enacted in India?
(a) 1985
(b) 1986
(c) 1987
(d) 1996

Ans: (b)

Q88. Wildlife Protection Act was enacted in:
(a) 1972
(b) 1982
(c) 1952
(d) 1992

Ans: (a)

Q89. Identify the programme which is not a non-formal Environment Education and Awareness Programme.
(a) Global Learning and Observations to Ben e-fit the Environment (GLOBE).
(b) Environmental Education in School System
(c) National Environment Awareness Ca m-paign (NEAC).
(d) Eco-clubs

Ans: (b)

Q90. Name the year of holding and enfor c-ing of the Ramsar Convention on Wetlands.
(a) 1971, 1975
(b) 1991, 1995
(c) 1951, 1955
(d) 1961, 1965

Ans: (a)

Q91. Which of the following categories of projects do not need Environmental Impact Assessment as per the Indian EIA Notifica-tion 2006?
(a) Category A
(b) Category B1
(c) Category B2
(d) All of the above

Ans: (c)

Q92. Which of the following projects has the shortest validity period of Environmental Clearance after Environmental Impact As-sessment?
(a) River valley projects
(b) Area development projects
(c) Harbour projects
(d) Mining projects

Ans: (b)

Q93. Which of the following should be co n-sidered in Environmental assessment study, interpretation and evaluation?
(a) Uncertainty of possible impacts
(b) Significance of measured impacts
(c) Comparison of alternatives
(d) All of the above

Ans: (d)

Q94. Which of the following is responsible for the public consultation process of EIA?
(a) State Pollution Control Agency
(b) State Pollution Control Board and CPCB Chairman
(c) State Pollution Control Board and District Collector
(d) State Pollution Control Board and Civil Society

Ans: (c)

Q95. According to the Indian EIA notific a-tion 2006, within how many days the propo-nent can continue with its own terms to re f-erence, in case Environmental Appraisal Committee do not specify the Terms of Ref-erence?
(a) 30 days

(b) 40 days
(c) 50 days
(d) 60 days

Ans: (d)

Q96. Which of the following sequences for impact assessment process in EIA is correct?
(a) Identification of impacts → Description of Environment → Prediction of impacts → Evaluation of impacts → Identification of mitigation needs.
(b) Identification of impacts → Prediction of impacts → Evaluation of impacts → Identification of mitigation needs.
(c) Description of Environment → Identification of impacts → Prediction of impacts → Evaluation of impacts → Identification of mitigation needs.
(d) Prediction of impacts → Identification of impacts → Description of environment → Evaluation of impacts → Identification of mitigation needs.

Ans: (c)

Q97. Which statement about Environmental Impact Assessment is correct?
(a) Involves broad range of potential alternatives.
(b) It provides early warning of cumulative effects.
(c) It focuses on sustainability agenda.
(d) It focuses on standard agenda.

Ans: (d)

Q98. Which of the following does not belong to EIA process?
(a) Developing EMS auditing procedures.
(b) Identification, Prediction and assessment of impact.
(c) Suggesting the mitigation measures.
(d) Setting up of base line environmental condition.

Ans: (a)

Q99. Which is not an EIA methods used for evaluating the effects of developmental activities on the environment?
(a) Adhoc
(b) Flexible
(c) Network
(d) Checklist

Ans: (b)

Q100. What will be the validity period of the EIA report of a hydropower project?
(a) 6 years
(b) 8 years
(c) 10 years
(d) 20 years

Ans: (c)

Q101. If the impact level of a developmental project is not discernible in the screening stage of EIA, what step should be taken?
(a) Scoping stage should be followed.
(b) Detail EIA study should be conducted.
(c) A swift EIA study should be conducted.
(d) The project should be given Environmental Clearance.

Ans: (c)

Q102. Which committee reviews the Environmental Impact Assessment and Environmental Management plan and reports of a developmental project in Ministry of Environment and Forest?
(a) Project Assessment Committee
(b) Project Evaluation Committee
(c) Project Estimate Committee
(d) Project Appraisal Committee

Ans: (d)

Q103. Which of the following is not involved in risk assessment in EIA?
(a) Preparation of disaster management plan
(b) Evaluation of economic benefit arising out of a project
(c) Maximum credible analysis
(d) Hazard and operability studies

Ans: (b)

Q104. Give the correct sequence of the functions associated with EIA?
(i) Impact evaluation and analysis
(ii) Identification
(iii) Prediction
(iv) Defining the scope Codes:

(a) (i) (iii) (iv) (ii)
(b) (ii) (iv) (i) (iii)
(c) (iii) (i) (ii) (iv)
(d) (iv) (ii) (iii) (i)

Ans: (d)

Q105. Which of the following are the functions of State Pollution Control Board in EIA?
(i) Collecting environmental data
(ii) Survey of fauna and flora
(iii) Public hearing/consultation
(iv) Issue of NOC Codes:
(a) (i) and (iii) only
(b) (i) and (ii) only
(c) (iii) and (iv) only
(d) (ii) and (iii) only

Ans: (c)

Q106. What is the desirable limit for hardness as CaCO3 as per Indian Standards (BIS) for drinking water?
(a) 300 mg/l
(b) 100 mg/l
(c) 200 mg/l
(d) 400 mg/l

Ans: (a)

Q107. Match List I with List II using the given codes.
List I List II
A. Life Cycle Assessment 1. 14020 series
B. Environmental Auditing 2. 14040 Series
C. Environmental Performance Evaluation 3. 14010 series
D. Environmental Labelling 4. 14030 series
Cod
(a) 1 4 3 2
(b) 3 1 2 4
(c) 2 3 4 1
(d) 4 2 1 3

Ans: (c)

Q108. In which of the following years did CPCB notify the National Ambient Air Quality Standards for major pollutants?
(a) 1964
(b) 1994
(c) 2004
(d) 1984

Ans: (b)

Q109. In urban environment, the noise index Leq is used for noise standards. What is the prescribed duration of the integration associated with Leq?
(a) 4 hours
(b) 8 hours
(c) 11 hour
(d) 15 hours

Ans: (b)

Q110. Ecomark can be defined as:
(a) A label given to an environment friendly products
(b) A label given to recycled products
(c) A label given to non-recyclable products
(d) A landmark indicating the boundaries of bioparks

Ans: (a)

Q111. Assertion (A): Weighing A is used to measure noise level surveys in urban areas.
Reason (R): Weighting A is a good filter of undesirable signals.
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) Both (A) and (R) are false.

Ans: (c)

Q112. What will be the sound pressure level at noise levels of 80 dB?
(a) 0.02 Pa
(b) 0.2 Pa
(c) 200 Pa
(d) 20 Pa

Ans: (b)

Q113. What is the surface litter layer on ground soil called?
(a) 'B' horizon
(b) 'A' horizon
(c) 'O' horizon
(d) 'C' horizon

Ans: (c)

Q114. Which of the following terms is used for the Phenomenon of having higher nu m-ber of species in ecotone?
(a) Determining effect
(b) Deciding effect
(c) Abundance
(d) Edge effect

Ans: (d)

Q115. Which is NOT a post audit activity in environmental audit process?
(a) Report audit findings.
(b) Issue of final report to functional specialist.
(c) Develop action plan to establish respons i-bility.
(d) Review of draft report by Law department.

Ans: (a)

Q116. Which of the following is the greatest source of BaP (Benzoapyrene) in atmo s-pheric environment?
(a) Cooked meat
(b) Residential wood burning
(c) Gasoline
(d) Coal tar

Ans: (b)

Q117. Which of the following Article of the Indian constitution guaranties Right to clean environment?
(a) Article 15
(b) Article 21
(c) Article 19
(d) Article 16

Ans: (b)

Q118. In which year did Public Liability Insurance Act come into existence?
(a) 1991
(b) 1979
(c) 1981
(d) 1995

Ans: (a)

Q119. What is the term used for the process of change in the gene pool of population over time?
(a) Chemical evolution
(b) Macroevolution
(c) Microevolution
(d) Inorganic evolution

Ans: (c)

Q120. In which of the following cities was Rio+20 summit held?
(a) Delhi
(b) Paris
(c) Rio de Janeiro
(d) Cancun

Ans: (c)

Q121. What is the application of GIS?
(a) Studying of view shed analysis
(b) Studying of environmental Impact Asses s-ment
(c) Studying of wildlife habitat analysis and migration routes planning
(d) All of the above

Ans: (d)

Q122. Arrange the components of an env i-ronmental management system in an order of sequence using the given codes.
I. Planning
II. Implementation
III. Environmental policy
IV. Monitoring
V. Review Codes:
(a) I, II, III, V, IV
(b) III, I, II, IV, V
(c) I, III, II, IV, V
(d) I, V, III, II, IV

Ans: (b)

Q123. Which of the following is known as International Year of Biodiversity?
(a) 2012
(b) 2018
(c) 2010
(d) 1982

Ans: (c)

Q124. Which of the following steps are fo l-lowed in post -disaster recovery phase in disaster management?
(a) Relief, mitigation, emergency plans.

(b) Risk Assessment, mitigation, preparedness, emergency plans.
(c) Relief, rehabilitation, reconstruction, lear n-ing–review
(d) Learning–review, emergency plans, pr e-paredness.

Ans: (c)

Q125. What does the abbreviation GLOBE stand for?
(a) Global Lending of Occupations to Benefit the Environment
(b) General Learning and Observations to Benefit the Environment
(c) Global Leaders and their Observations to Benefit the Environment
(d) Global Learning and Observations to Ben e-fit the Environment

Ans: (d)

Q126. With what objectives the Basel Co n-vention (1989) under UNEP was convened?
I. Reducing generation of hazardous wastes.
II. Disposal of hazardous wastes near the source of generation.
III. Control the movement of hazardous wastes.
Choose the correct c
(a) I only
(b) II and III only
(c) I and II only
(d) I, II and III

Ans: (d)

Q127. What does CBD stand for?
(a) Conservation Association for Biodiversity and Management
(b) Convention on Biological Diversity
(c) Conservation Biodiversity Development
(d) Cumulative Plan for Biological Diversity

Ans: (b)

Q128. Match the List I with List II using the given codes.
List I List II
A. Mollisol 1. Rich in iron oxide
B. Oxisol 2. Tundra
C. Soils of high altitude 3. Tropical rain forest
D. Soils of low altitude 4. Prairie soil Codes:
A B C D
(a) 3 4 1 2
(b) 3 4 2 1
(c) 1 2 3 4
(d) 2 3 4 1

Ans: (d)

Q129. Which of the following elements are contained more in Laterite soil?
(a) Nitrogen and Boron
(b) Iron and Aluminium
(c) Manganese and Silicate
(d) Potassium and Lead

Ans: (b)

Q130. Which of the following is the globally accepted technique for isolating semi vol a-tile organic compounds from their matr i-ces?
(a) Electrification
(b) Permeation
(c) Sedimentation technique
(d) Solvent extraction

Ans: (d)

Q131. The relationship in which one orga n-ism benefits at the cost of the other is called:
(a) Parasitism
(b) Predation
(c) Symbiosis
(d) Scavenging

Ans: (a)

Q132. Which is not a major type of se a-shore?
(a) Sandy shore
(b) Rocky shore
(c) Clayey shore
(d) Muddy shore

Ans: (c)

Q133. What is the term used for Low-high tides?
(a) Neap tide
(b) Spring tide
(c) High tide
(d) Low tide

Ans: (a)

Q134. Which of the following comprise bi o-gas produced in an aerobic bacterial activi-ty?
(a) H2S, CO2, CO, CH4 and LPG
(b) CH3OH, CO2, NH3 and H2O
(c) CO2, SO2, NO2, CH4 and H2O
(d) CH4, CO2, NH3, H2S and H2O

Ans: (d)

Q135. Which of the following is illustrated through the example of the evolution of g e-netic resistance to antibiotics among di s-easecarrying bacteria?
(a) Stabilizing natural selection
(b) Diversifying natural selection
(c) Directional natural selection
(d) Convergent natural selection

Ans: (c)

Q136. What is the term used for parasites that initiate production of antibodies within hosts?
(a) Zooparasites
(b) Endoparasites
(c) Homoparasites
(d) Pathogenic parasites

Ans: (d)

Q137. What is the difference between mi n-eral resource and reserve?
(a) Resource refers to high degree of geolog i-cal knowledge
(b) Reserve refers to high degree of economic viability
(c) Resource refers to high degree of economic viability and high degree of geological knowledge
(d) Reserve refers to high degree of economic viability and high degree of geological knowledge

Ans: (d)

Q138. What is the characteristic difference between both the polar Ice Caps?
(a) Antarctic Ice Cap is on land
(b) Arctic Ice Cap is on land
(c) Both are on land but Antarctic Ice Cap is thicker
(d) Both are on sea but Arctic Ice Cap is thic k-er

Ans: (a)

Q139. ~ 900 kJ/mol of energy is released during the combustion of methane. What is the carbon intensity of methane?
methane is
(a) ~ 0.013 gram C/kJ
(b) ~ 0.06 gram C/kJ
(c) ~ 0.021 gram C/kJ
(d) ~ 1.12 gram C/kJ

Ans: (a)

Q140. Match the List I with List II using the given codes:
List I (Date) List II (Event)
A. 5th June *(i)* World Forest Day
B. 2nd December (ii) Bio-diversity Day
C. 22nd May (iii) National Pollution Preve n-tion Day
D. 21st March (iv) World Environment Day C
(a) (ii) *(i)* (iv) (iii)
(b) (iii) (ii) (iii) (iv)
(c) (iv) (ii) *(i)* (iv)
(d) *(i)* (iii) (ii) *(i)*

Ans: (c)

Q141. What was the major factor respons i-ble for the large number of deaths during the 2004 earthquake in Indonesia?
(a) Tsunami
(b) Fires
(c) Epidemic diseases
(d) Death on account of openings on surface

Ans: (a)

Q142. Identify the fuels that have highest carbon intensity?
(a) Bituminous coal
(b) Biomass
(c) Natural gas
(d) Oil

Ans: (a)

Q143. Which environmental factor causes cyclomorphism in animals?
(a) Photoperiod
(b) Temperature

(c) Wind
(d) Moisture

Ans: (b)

Q144. Identify the river having maximum melt water component in its discharge?
(a) Indus
(b) Yamuna
(c) Brahmaputra
(d) Sutlej

Ans: (a)

Q145. A non-reactive oxygen species is:
(a) Superoxide anion
(b) Singlet oxygen
(c) Hydrogen peroxide
(d) Hydroxyl ion

Ans: (d)

Q146. Assertion (A): Tropical and subtropical regions are most suitable for OTEC.
Reason (R): These regions have certain minimum vertical gradient (> 25 °C/km) necessary for OTEC to become feasible.
Codes:
(a) Both (A) and (R) are true and (R) is the correct explanation.
(b) Both (A) and (R) are true, but (R) is not the correct explanation.
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

Ans: (a)

Q147. What will be the condition of atmosphere for an overcast day or night?
(a) Stable
(b) Slightly stable
(c) Neutral
(d) Unstable

Ans: (c)

Q148. Which of the following affect the environmental lapse rate during day time?
(i) Wind speed
(ii) Cloud cover
(iii) Topographical features
(iv) Sunlight The correct answer is
(a) (i) and (ii) only
(b) (ii) and (iii) only
(c) (i), (iii) and (iv) only
(d) (i) and (iv) only

Ans: (c)

Q149. What is the range of wavelength of UV–C radiations?
(a) 330–390 nm
(b) 170–230 nm
(c) 200–280 nm
(d) 250–300 nm

Ans: (c)

Q150. What does the term permafrost imply?
(a) They are frozen needles of pine trees
(b) They are frozen leaves of Oak trees
(c) It is the permanently frozen subsurface soil
(d) It is the temporarily frozen subsurface soil

Ans: (c)

Q151. Identify the material that has the best hydraulic conductivity.
(a) Sandstone
(b) Quartzite
(c) Clay
(d) Limestone

Ans: (a)

Q152. Match the List I (Materials) with List II (Applications) using the given codes:
List I List II
A. Trichloroethylene 1. Wood treatment
B. Toluene 2. Gasoline
C. Zinc 3. Mining Dry
D. Phenol 4. cleaning Codes:
A B C D
(a) 3 1 4 2
(b) 2 3 1 4
(c) 1 4 2 3
(d) 4 2 3 1

Ans: (d)

Q153. Assertion (A): Chemosynthesis is very essential in 'S' cycle.
Reason (R): In chemosynthesis, some sulphur compounds function as source of energy.
(a) Both (A) and (R) are true and (R) is the correct explanation.

(b) Both (A) and (R) are true and (R) is not the correct explanation.
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true.

Ans: (b)

Q154. Identify the statement that is NOT correct.
(a) Temperature is lowest and precipitation is highest at the poles.
(b) Subtropical high pressure zones create dry zones at about 30° N and S.
(c) Temperature and precipitation are lowest at the poles.
(d) Tropical regions are the war mest and we t-test regions.

Ans: (a)

Q155. Identify the set of reagents used for the analysis of oxides of Nitrogen?
(a) Sulphamic acid, Nicotine, H2O, HNO3
(b) Sulphamic acid, NEDA, H2O2, HNO3
(c) Sulphanilic acid, NEDA, H2O2, HNO3
(d) Sulphomolybdic acid, NEDA, H2O2, H2SO4

Ans: (c)

Q156. What does the presence of ammonia in groundwater indicate at?
(a) A nearby coal mine
(b) A nearby granite quarry
(c) A nearby thermal power plant
(d) A nearby municipal solid waste dumping site

Ans: (d)

Q157. Identify the country where dry steam deposits have been used for generation of electricity?
(a) Austria
(b) New Zealand
(c) Italy
(d) Iceland

Ans: (c)

Q158. What is the term used for the r e-sources that are unlimited and the quality of which is not degraded?
(a) Reusable
(b) Immutable
(c) Renewable
(d) Exhaustible

Ans: (b)

Q159. Match the List I (Events) with List II (Date) using the given codes.
List I
(Acts) List II
(Year when enacted)
A. Earth Day i. 22nd April
B. World Environment Day ii. 5th June
C. Ozone Day iii. 3rd October
D. World Nature Day iv. 16th September Code
(a) i ii iv iii
(b) iii i iv ii
(c) ii i iii iv
(d) iv iii ii i

Ans: (a)

Q160. Which of the following pairs concer n-ing the toxic metal and associated adverse impact is correctly matched?
(a) Ni—Keratosis
(b) Zn—Brain tissue damage
(c) Ar—Renal poisoning
(d) Hg—Pulmonary disease

Ans: (b)

Q161. Which of the following governs rad i-oactive waste management in India?
(a) Hazardous Waste (Management, Handling and Tran boundary Movement)
(b) Atomic Energy Act, 1962
(c) Biomedical Waste (Management and Ha n-dling) Rules 1998
(d) Environment (Protection) Act, 1986

Ans: (d)

Q162. Which of the following noise indices represents the background noise level in a particular area?
(a) L20
(b) L70
(c) L90
(d) TNI

Ans: (c)

Q163. What is the chemical formula for CFC-11?
(a) CF3Cl2
(b) CHCl3
(c) CHFCl2
(d) CFCl3

Ans: (d)

Q164. In which of the following conditions do the smokestack plumes show 'coning' behaviour?
(a) When inversion exists right from the ground surface above
(b) When the height of the stack is below the inversion layer
(c) In unstable atmospheric conditions
(d) In stable atmospheric conditions

Ans: (d)

Q165. The oxidation of which of the follo w-ing forms Peroxyacetyl Nitrate (PAN)?
(i) Hydrocarbons
(ii) Arsenic
(iii) Terpene
(iv) Isoprene Choose the correct answer from the codes:
Codes:
(a) (i), (ii) and (iii)
(b) (i), (ii) and (iv)
(c) (ii), (iii) and (iv)
(d) (i), (iii) and (iv)

Ans: (d)

Q166. Which of the following causes pulm o-nary oedema?
(a) Methane
(b) Sulphur dioxide
(c) Carbon monoxide
(d) Nitrous oxide

Ans: (d)

Q167. Blood becomes toxic, after combining with haemoglobin gets combined with:
(a) CO
(b) CO2
(c) CH4
(d) SO2

Ans: (a)

Q168. Which of the following can inhibit respiratory electron transport chain?
(a) H2S
(b) ADP
(c) Phosphate
(d) CO2

Ans: (a)

Q169. Assertion *(A)*: Oil spill in the ocean leads to large scale death of fish.
Reason *(R)*: Oil clogs the gills of fish get.
Point out the correct one of the following:
(a) Both *(A)* and *(R)* are true with *(R)* being the correct explanation.
(b) Both *(A)* and *(R)* are true but *(R)* is not the correct explanation.
(c) (A) is true, but *(R)* is wrong.
(d) Both *(A)* and *(R)* are wrong.

Ans: (a)

Q170. To which of the following type of a l-lergies does „Bermuda grass allergy' be-long?
(a) Waterborne allergy
(b) Contact allergy
(c) Airborne allergy
(d) Soilborne allergy

Ans: (c)

Q171. Which material does not break down easily?
(a) Amino acids
(b) Chitin
(c) Cellulose
(d) Hemicellulose

Ans: (c)

Q172. Which of the following mineral is most resistant to chemical weathering?
(a) Olivine
(b) Biotite
(c) K-feldspar
(d) Quartz

Ans: (d)

Q173. By which of the following processes can we obtain bio-oil from lignocelluloses?
(a) Gasification
(b) Combustion

(c) Fast pyrolysis
(d) Transesterification

Ans: (c)

Q174. What does the term B10 refer to?
(a) Blending 1 per cent biodiesel with 10 per cent conventional diesel.
(b) Blinding 90 per cent biodiesel with 10 per cent conventional diesel.
(c) Blending 50 per cent biodiesel with 50 per cent conventional diesel.
(d) Blinding 10 per cent biodiesel with 9 0 per cent conventional diesel.

Ans: (d)

Q175. Which of the following statements about hazardous wastes is NOT correct?
(a) They have one or more of 39 toxic co m-pounds
(b) They are nonreactive and stable
(c) They are highly combustible
(d) They are capable of corroding metal co n-tainers

Ans: (b)

Q176. Assertion (A): Continual exposure to ozone is a possible factor of decline of fo r-ests.
Reason (R): Surface ozone is a green house gas.
(a) Both (A) and (R) are true and (R) is the cor-rect explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) (A) is false, but (R) is true.

Ans: (b)

Q177. Which of the following is the most dominant pollutant in urban atmosphere according to its concentration level?
(a) Carbon monoxide
(b) Particulate matter
(c) Oxides of sulphur
(d) Oxides of nitrogen

Ans: (a)

Q178. Which of the following are the major constituents of photochemical smog?
(a) Oxides of sulphur and CO
(b) Oxides of nitrogen, hydrocarbons and ozone
(c) Oxides of nitrogen and CO
(d) Oxides of sulphur and hydrocarbons

Ans: (b)

Q179. Which of the following activities is/are involved in „high -waste approach' in dealing with the solid and hazardous wastes?
(a) Composting
(b) Recycling
(c) Burying and burning
(d) Reusing

Ans: (c)

Q180. Assertion (A): Discharge of sewage in river water may reduce oxygen even below 4 mg/l.
Reason (R): Discharge of sewage pollutes river water heavily.
(a) Both (A) and (R) are true with (R) being the correct explanation.
(b) Both (A) and (R) are true, but (R) is not the correct explanation.
(c) (A) is true, but (R) is wrong.
(d) Both (A) and (R) are wrong.

Ans: (a)

Q181. Flexible plastic bags and sheets are produced using:
(a) Polystyrene (PS)
(b) Low density polyethylene (LDPE)
(c) Polyethylene terephthalate (PET)
(d) TEFLON

Ans: (b)

Q182. Which of the following decades has been declared as „UN Decade of Education for sustainable Development' by the United Nations?
(a) 2016–2025
(b) 2011–2020
(c) 2005–2014
(d) 2012–2021

Ans: (c)

Q183. What is Halon – 1301?

(a) It is a refrigerant
(b) It is a solvent
(c) It is a fire extinguisher
(d) It is an Aerosol propellant

Ans: (c)

Q184. Identify a primary pollutant in a t-mospheric air amongst the given options?
(a) Nitrates
(b) Cl2
(c) SO3
(d) Sulphates

Ans: (b)

Q185. Which of the following chlorinated hydrocarbons is the most toxic?
(a) Aldrin
(b) Endrin
(c) DDT
(d) Heptachlor

Ans: (b)

Q186. What is Agent Orange?
(a) It is a fungicide
(b) It is a rodenticide
(c) It is a nematicide
(d) It is a weedicide

Ans: (d)

Q187. Which of the following is the major source of SO2?
(a) Cement Industry
(b) Volcanic activity
(c) Combustion of paper
(d) Forest fires

Ans: (b)

Q188. Which of the following causes Blue baby syndrome?
(a) Carbon dioxide
(b) Methane
(c) Nitrate
(d) Mercury

Ans: (c)

Q189. In mining of which of the following, drainage of acid is more?
(a) Bauxite
(b) Base metal sulphide
(c) Lime stone
(d) Granite

Ans: (b)

Q190. Which of the following affect coal mining areas?
(i) Radioactive waste
(ii) Fire hazard
(iii) Land subsidence
(iv) Air pollution
(a) (i) and (ii)
(b) (i), (ii) and (iii)
(c) (i), (ii) and (iv)
(d) (ii), (iii) and (iv)

Ans: (d)

Q191. Which of the following is involved in solid waste treatment by pyrolysis?
(a) Autoclaving
(b) Heating in absence of air
(c) Heating in presence of air
(d) Heating in presence of acetic acid

Ans: (b)

Q192. Which of the following is the medium of the concentration of Sr90 in the body?
(a) Skin
(b) Food chain
(c) Drinking water
(d) Inhaling contaminated air

Ans: (b)

Q193. Match List I (Air Pollutants) with List II (Sources) using the given codes.
List I List II
A. Carbon monoxide 1. Power and Industrial Plant
B. Nitrogen oxide 2. Chemical reaction with VOCs
C. Sulphur dioxide 3. Cigarette Smoking
D. Ozone 4. Burning
(a) 2 4 1 3
(b) 1 2 3 4
(c) 3 1 4 2
(d) 4 3 2 1

Ans: (c)

Q194. Which parameter is not a good ind i-cator of contamination in ground water?

(a) Silica
(b) BOD
(c) Chloride
(d) Nitrates

Ans: (a)

Q195. Which of the following states of Cr (Chromium) is most toxic?
(a) Cr4+
(b) Cr3+
(c) Cr6+
(d) Cr5+

Ans: (c)

Q196. Assertion (A): There is always a po s-sibility of groundwater getting seriously contaminated in coastal areas.
Reason (R): Groundwater overdrafts adjoining coastal areas can contaminate groundwater supplies by letting saline water to enter into freshw
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(c) (A) is true and (R) is false.
(d) (A) is false and (R) is true.

Ans: (a)

Q197. Which of the following can be the r e-sults of prolonged exposure to high levels of noise?
(i) Hearing loss
(ii) Toxicity
(iii) Gastric ulcers
(iv) Constriction of blood vessels Identify the correct answer:
(a) (i), (ii) and (iv) only
(b) (i), (iii) and (iv) only
(c) (i), (ii) and (iii) only
(d) (i), (ii), (iii) and (iv)

Ans: (b)

Q198. In which of the following is the least quantity of ash found in a typical municipal solid waste?
(a) Leather
(b) Textiles
(c) Rubber
(d) Plastic

Ans: (b)

Q199. Which of the following is a major source of Arsenic in Municipal Solid W a-ter?
(a) Batteries
(b) Rubber products
(c) Household pesticides
(d) Pigments in plastics

Ans: (c)

Q200. What does the abbreviation REDD imply?
(a) Reducing Emissions from Deforestation and Forest Degradation
(b) Recurring Emission from Deforestation and Forest Degradation
(c) Reducing Environmental Degradation and Forest Degradation
(d) Reducing Emissions from Degradable D e-posits of Wastes

Ans: (a)

Q201. Identify the source of energy which is not renewable on human time scale.
(a) Hydrothermal
(b) Geothermal
(c) Biomass
(d) Solar

Ans: (b)

Q202. What is the correct sequence of the fuels according to their carbon intensity from low to high?
(a) Nuclear < Coal < Natural gas < Oil
(b) Nuclear < Natural gas < Oil < Bituminous coal
(c) Natural gas < Oil < Bituminous coal < N u-clear
(d) Oil < Coal < Natural gas < Nuclear

Ans: (b)

Q203. Which of the following causes a s-phyxiation?
(a) NOx
(b) AsH3
(c) CHCl3
(d) HCN, COCl2

Ans: (d)

Q204. What will be the correct sequence of the process of a sewage treatment plant operation?
(a) Aeration → Sedimentation → Flocculation → Filtration → Recarbonation → Disinfection
(b) Aeration → Flocculation → Sedimentation → Recarbonation → Filtration → Disinfection
(c) Flocculation → Aeration → Recarbonation → Sedimentation → Filtration → Disinfection
(d) Sedimentation → Flocculation → Aeration → Filtration → Recarbonation → Disinfection

Ans: (b)

Q205. Match the List I (Aerosols) with List II (Constituents) and identify the correct answer from given codes:
List I
(Acts) List II
(Year when enacted)
A. Dust i. Solid suspended particles
B. Mist ii. Suspended small liquid droplets
C. Smoke iii. Black
(a) iv iii ii i
(b) iii iv i ii
(c) ii i iii iv
(d) i ii iii iv

Ans: (d)

Q206. Which of the following is a good indicator to show the presence of SO2 and HF in air?
(a) Tea
(b) Coffee
(c) Lichen
(d) Tobacco

Ans: (c)

Q207. Assertion (A): Urban heat islands of urban region are responsible for the concentration of pollutants in cities.
Reason (R): Urban heat islands cause a stable air mass in the atmosphere of the city.
(a) Both (A) and (R) are correct and (R) is the correct explanation of (A).
(b) Both (A) and (R) are correct, but (R) is not the correct explanation of (A).
(c) (A) is true, but (R) is false.
(d) Both (A) and (R) are false.

Ans: (a)

Q208. What is the correct order of hierarchy of priorities in hazardous waste management?
(a) Reduce generation → Eliminate generation → Treatment → Recycle/Reuse → Disposal
(b) Reduce generation → Eliminate generation → Recycle/ Reuse → Treatment → Disposal
(c) Eliminate generation → Reduce generation → Treatment → Recycle/Reuse → Disposal
(d) Eliminate generation → Reduce generation → Recycle/ Reuse → Treatment → Disposal

Ans: (d)

Q209. The gases involved in the generation of biogas are:
(a) CO, CH4, NH3, H2S, H2O (vapour)
(b) CO2, NOx, H2O, CH4
(c) CO2, CH4, N2O, NH3, H2O (vapour)
(d) CO2, CH4, NH3, H2S, H2O (vapour)

Ans: (d)

Q210. Identify the material that has the highest bioconcentration factor (BCF).
(a) Heptachlor
(b) DDE
(c) Chlordane
(d) DDT

Ans: (d)

Q211. Which of the following is responsible for hardness of water?
(a) Sodium and Chloride ions
(b) Potassium and Nitrite ions
(c) Calcium and Magnesium ions
(d) Strontium and Nitrate ions

Ans: (c)

Q212. Which of the following are the major constituents of atmospheric brown clouds?
I. Fly ash
II. Soil dust
III. Soot
IV. Sulphates and nitrates Identify the correct code:
(a) I and II only

(b) I and IV only
(c) II, III and IV only
(d) I, II, III and IV

Ans: (d)

Q213. In which of the following years was 'London Smog' observed?
(a) 1755
(b) 1952
(c) 1972
(d) 1970

Ans: (b)

Q214. What is the permissible limit of day time industrial noise in accordance with the guidelines set by WHO?
(a) 90 dB
(b) 78dB
(c) 80 dB
(d) 75 dB

Ans: (d)

Q215. Which environment affecting gas is released by hydropower projects having large reservoirs?
(a) CO2
(b) CH4
(c) NO2
(d) CO

Ans: (b)

Q216. In which phase of EIA process is terms of reference fixed?
(a) Scoping stage
(b) Project Appraisal stage
(c) Screening stage
(d) Detailed EIA stage

Ans: (a)

Q217. What is the percentage range of carbon in a typical municipal solid waste?
(a) 40–50%
(b) 50–60%
(c) 30–40%
(d) 20–30%

Ans: (b)

Q218. Identify the process involving maximum destruction and removable efficiency?
(a) Chemical Treatment
(b) Biological Treatment
(c) Incineration
(d) Landfill

Ans: (c)

Q219. At what level of pH do Wastes turn corrosive?
(a) £ 2
(b) £ 3
(c) £ 4
(d) £ 5

Ans: (a)

Q220. What was the quantity of Methyl Isocyanate that leaked in Bhopal gas tragedy?
(a) ~ 160 tonnes
(b) ~ 40 tonnes
(c) ~ 140 tonnes
(d) ~ 60 tonnes

Ans: (b)

Q221. In plants, ammonium is often converted to nitrate before it can be used by the plant. This process is known as:
(a) Photosynthesis
(b) Denitrification
(c) Nitrogen fixation
(d) Nitrification

Ans: (b)

Q222. A hydroturbogenerator would be found:
(a) At a hydroelectric dam.
(b) At a coal-fired power plant.
(c) Inside of a wind mill used to generate electricity.
(d) In a power plant that uses oil for fuel.

Ans: (a)

Q223. A pharmacist asks a mother about a new prescription for an antibiotic, wanting to be sure that the drug is for the mother. The pharmacist is most likely concerned because
(a) Antibiotics do not typically work on children.
(b) Most types of antibiotics prescribed to an adult will likely kill a child.

(c) A normal dosage for an adult can be toxic to a child.
(d) A normal child's dosage may be toxic to an adult.

Ans: (c)

Q224. A rural farmer most likely obtains drinking water by drilling a deep well to use
(a) Gravitational water that has percolated through soil and accumulated as groundwater.
(b) Gravitational water that is retained by the soil and accumulated just above the water t able.
(c) Capillary water found in surface waters, located above the water table.
(d) Capillary water that has percolated through soil and accumulated below the groundwater.

Ans: (a)

Q225. A temperature inversion occurs when
(a) High levels of sunshine burn off a fog.
(b) Regions experience high winds and intense sunshine.
(c) The air near the ground is cooler than the air at higher altitudes.
(d) The air near the ground is warmer than the air at higher altitudes.

Ans: (c)

Q226. A well -trained health worker is a p-pointed to provide assistance to a village in India that suffers greatly from typhoid f e-ver. The best long -term solution to reduce the cases of this disease in this village is to
(a) Encourage people to always wash their hands using antibacterial soap.
(b) Clearly separate their sewage to avoid co n-tamination with water supplies.
(c) Teach the people to cover their coughs and sneezes to avoid disease transmission.
(d) Increase the amount of vitamins C and E in the diet of these villagers.

Ans: (b)

Q227. About 150 years ago, self -sufficiency in the production of food no longer became restrictive to countries because of
(a) The global decline in droughts, blights, or wars.
(b) The Industrial Revolution.
(c) The Green Revolution.
(d) Biotechnology.

Ans: (c)

Q228. About 40 per cent of the land's primary production on Earth
(a) Has been appropriated to meet human needs.
(b) have been destroyed by global climate change.
(c) uses more oxygen than it produces.
(d) has been lost just to build enough homes for all of the people on Earth.

Ans: (a)

Q229. According to the WHO, the greatest killer in the world is:
(a) Infectious disease
(b) Cancer
(c) Heart disease
(d) Poverty

Ans: (d)

Q230. Although considerable variation e x-ists around the world, global primary ene r-gy supply depends on
(a) fossil fuels, with oil first, coal second, and natural gas third.
(b) fossil fuels, with coal first, oil second, and natural gas third.
(c) renewable sources of energy with wind power first, nuclear second, and hydroelectric i-ty third.
(d) renewable sources of energy with nuclear first, wind power second, and hydroelectricity third.

Ans: (a)

Q231. Anaerobic respiration
(a) occurs without oxygen and may produce methane gas.
(b) is a type of photosynthesis that does not require carbon dioxide.
(c) typically results in increased biomass.
(d) requires oxygen to break down glucose and other plant sugars.

Ans: (a)

Q232. Arriving at the hotel on vacation, a man decides to go straight to the swimming pool. Upon stepping into the pool area, he quickly finds it difficult to breathe because of the high levels of chlorine in the air above the pool. This man is experienci
(a) a lethal reaction to the chlorine in the air.
(b) a chronic reaction to the chlorine in the air.
(c) an acute reaction to the chlorine in the air.
(d) a carcinogenic reaction to the chlorine in the air.

Ans: (c)

Q233. At the current rates of use, the United States has enough coal to last the next:
(a) 20 years
(b) 40 years
(c) 100 years
(d) 230 years

Ans: (d)

Q234. Atmospheric nitrogen is converted to nitrogen oxides
(a) when fossil fuels are burned at high co m-bustion temperatures.
(b) if the sun is shining brightly and there is a temperature inversion.
(c) on cloudy days when carbon and soot le v-els are unusually high.
(d) if radon gas is present when gasoline is burned in automobiles.

Ans: (a)

Q235. Because of the challenges associated with removing oil from the ground,
(a) the first oil removed from a well is the most expensive to extract.
(b) primary recovery of oil is more expensive than secondary recovery.
(c) enhanced recovery of oil is more expensive than secondary recovery.
(d) only about 60 per cent of the oil in a well can be removed by just pumping.

Ans: (c)

Q236. Because of the main way that hybrid vehicles save fuel, hybrid electric vehicles
(a) must be plugged in to power outlets at night or when parked for long periods.
(b) must have their batteries changed about every 50,000 miles.
(c) often have better mileage in cities than on highways.
(d) cannot be produced with four -wheel drive powertrains.

Ans: (c)

Q237. Chemical methods to extract some usable energy from glucose molecules with-out using oxygen are possible and used by many organisms. However, cell respiration reactions using oxygen are more common because using oxygen
(a) yields many more energy units than anae r-obic respiration.
(b) generates water needed by most organisms to survive.
(c) provides carbon dioxide that is essential for photosynthesis.
(d) allows glucose to be s tored instead of burned.

Ans: (a)

Q238. Chronic obstructive pulmonary di s-ease (COPD) is the fourth leading cause of death in the developed nations. This disease primarily affects
(a) the respiratory passageways and alveoli of the lungs.
(b) the oesophagus, stomach, and other po r-tions of the digestive tract.
(c) the mouth, nose, and pharynx in the upper respiratory tract.
(d) the heart, blood, and blood vessels throughout the body.

Ans: (a)

Q239. Composting toilet systems require:
(a) Aerobic bacteria
(b) Anaerobic bacteria
(c) Large fungal colonies
(d) Large volumes of water

Ans: (a)

Q240. Devastating earthquakes struck Haiti in January 2010, forcing the native people to live under the most primitive of cond i-tions.

Which one of the following forms of immed iate aid would most likely prevent the greatest amount of disease in refugees wh
(a) A large supply of clothing, dish soap, and toiletries
(b) Large supplies of rice and pots to cook the rice in
(c) Water filtration systems and supp lies of bottled water
(d) Tents and blankets to help the people get away from the sun and keep warm at night

Ans: (c)

Q241. Developing a new form of ecological pest control, researchers engineer crops to produce the pheromones of the pest. The crops now produce the pest pheromone, overwhelming the fields and causing the male pests to fail to find a mate. This new form of
(a) natural enemies and cultural control.
(b) cultural and natural enemies control.
(c) genetic and cultural control.
(d) genetic and natural chemical control.

Ans: (d)

Q242. Discriminatory trade practices that favour industrialized countries over deve l-oping countries are
(a) rare and are gradually being eliminated.
(b) not issues of environmental science.
(c) ways that industrialized countries support sustainable resource management.
(d) the number one issue at every meeting of the World Trade Organization.

Ans: (d)

Q243. During photosynthesis, simple sugars are produced at the end of
(a) the light reactions.
(b) cellular respiration.
(c) the electron transport pathway.
(d) the Calvin cycle.

Ans: (d)

Q244. Energy is lost as it moves from one trophic level to the next because
(a) one trophic level does not consume the e ntire trophic level below it.
(b) some of the calories consumed drive cell u-lar activities and do not add mass.
(c) some ingested materials are undigested and eliminated.
(d) All of the above.

Ans: (d)

Q245. Even greater health risks are assoc i-ated with a person who smokes and
(a) delivers mail in a farming community.
(b) works inside of an office building.
(c) works in a coal mine.
(d) jogs in a park for exercise.

Ans: (c)

Q246. Every day, tremendous amounts of the sun's energy strikes the Earth. Why doesn't the Earth overheat?
(a) Much of the heat melts rocks, forming lava deep inside the Earth.
(b) Most of the energy is used in photosynth e-sis, to help plants grow and survive.
(c) The energy mostly is absorbed in various weather systems.
(d) The energy is ultimately radiated bac k to space.

Ans: (d)

Q247. Fog is more likely to form when air temperatures are
(a) colder than the surrounding land.
(b) warmer than the surrounding land.
(c) the same as the surrounding land.
(d) rising.

Ans: (a)

Q248. Generating electricity with a win d-mill located next to a home
(a) is more efficient than transmitting electric i-ty over long distances.
(b) is less efficient than at a distance, because the wind draws heat away from the home.
(c) increases the energy lost, according to the Second Law of Thermodynamics.
(d) depends upon a hydroturbogenerator spi n-ning a magnetic field within copper wire.

Ans: (a)

Q249. Good health in the modern world, with few cases of bacterial infection, is largely the result of
(a) the development and widespread use of new immunizations.
(b) clean water supplies and proper treatment of sewage.
(c) widespread use of bleach, antibiotics, and antibacterial soaps.
(d) frequent bathing and washing of clothing and dishes.

Ans: (b)

Q250. Hundreds of millions of years ago, when fossil fuels were formed, large amounts of
(a) carbon dioxide were trapped underground.
(b) nitrogen were trapped in rocks during e x-tensive volcanic activity.
(c) sodium were used to form ancient fossils, seashells, and limestone.
(d) phosphate gas were added to the atmo s-phere through erosion and evaporation.

Ans: (a)

Q251. Hydroelectric power
(a) generally requires the construction of dams.
(b) does not contribute to global warming.
(c) is a renewable source of energy.
(d) All of the above.

Ans: (d)

Q252. If a cold front moves into a moist r e-gion
(a) humidity will likely decrease.
(b) the chances of precipitation will increase.
(c) evaporation will increase.
(d) photosynthesis will increase.

Ans: (b)

Q253. If a plowed farm field were converted back to natural grassland, we would expect that
(a) flooding would be more common in the related watershed.
(b) more pollutants would flow into the wate r-shed.
(c) erosion of the soil would decrease.
(d) less water would be retained in the groundwater reservoir.

Ans: (c)

Q254. If people do not easily spread bird flu from person to person, how can bird flu v i-rus spread in the world?
(a) Vaccines against bird flu might spread the disease all over the world
(b) Antibiotics against bird flu will stop wor k-ing
(c) Migrating birds might spread the flu widely
(d) Hunters shooting the birds and eating the meat might be infected

Ans: (d)

Q255. If the precautionary principle is a p-plied, a pharmaceutical company that di s-covers a new drug for blood pressure must demonstrate
(a) the safety of the drug before it is approved.
(b) the need for the new drug before it is a p-proved.
(c) that the drug is cost -effective before it is approved.
(d) that the drug poses no environmental risks.

Ans: (a)

Q256. In 2007, heavy rains contributed to an outbreak of cholera in children living in war-torn Iraq. What was the likely cause of the spread of this disease?
(a) Pollution of waterways by raw sewage
(b) Outbreaks of mosquitoes
(c) Lack of protection from the rain caused the children to be very cold
(d) Rain-soaked roads prevented the distrib u-tion of muchneeded food supplies

Ans: (a)

Q257. In the 1900s, fuel efficiency in tran s-portation greatly increased when engines were converted from
(a) natural gas to coal and steam.
(b) oil to coal and steam.
(c) coal and steam to gasoline.
(d) natural gas to gasoline.

Ans: (c)

Q258. In the developed countries, more lives could be saved if one simply
(a) drove more safely and did not abuse drugs.
(b) stopped smoking and reduced obesity.
(c) stopped drug abuse and suicides.
(d) reduced the number of infections with HIV.
Ans: (b)

Q259. In the near future, the benefits of biofuel production may be enjoyed while reducing the impact on the global production of grain. One such promising approach is to
(a) bioengineer cattle and goats to produce ethanol in their milk.
(b) produce biofuels from grasses and timber wastes instead of corn.
(c) use the large amounts of animal wastes to produce ethanol.
(d) find ways to convert oil and natural gas into ethanol.
Ans: (b)

Q260. In the winter in North India, the common cold often shows:
(a) High morbidity but low mortality.
(b) High morbidity and high mortality.
(c) Low morbidity but high mortality.
(d) Low morbidity and low mortality.
Ans: (a)

Q261. In the world today, coal
(a) is still the dominant fuel.
(b) has largely been replaced by natural gas for energy supplies.
(c) remains the dominant fuel in the world.
(d) has been replaced by oil as the primary energy supply.
Ans: (d)

Q262. Increased reliance upon oil imports have generally paralleled
(a) increased interest in Middle East politics.
(b) increased interest in fighting global hunger.
(c) decreased reliance on other fossil fuels.
(d) decreased efforts to explore alternate forms of fuel.
Ans: (a)

Q263. Increasing the insulation in a home will most likely
(a) increase the risk of developing an infectious disease.
(b) decrease acute reactions to pollutants already in the home.
(c) decrease the chances of developing chronic respiratory diseases.
(d) increase the chances of developing chronic respiratory diseases.
Ans: (d)

Q264. Instead of only generating more electricity, rising energy demands may also be met by
(a) switching from natural gas to coal.
(b) switching from coal and natural gas to windmills and solar technologies.
(c) increasing the efficiency of energy consumption.
(d) using more nuclear power instead of fossil fuels.
Ans: (c)

Q265. Isolated viral outbreaks can quickly become global threats if the virus is easily
(a) transferred between infected animals and people.
(b) transferred between people who then travel widely while infected.
(c) transferred between people who then quickly get ill and do not travel.
(d) transferred from infected people to people already ill with other diseases.
Ans: (a)

Q266. Large-scale commercial extraction of oil from oil shale and oil sand
(a) will only be cost -effective at much higher oil prices.
(b) are relatively easy, low impact methods that remain to be used.
(c) are impractical sources of oil that will not ever be used widely.
(d) produces an oil that cannot be used to produce gasoline.
Ans: (a)

Q267. Lingering in a long line at the dry cleaners, waiting for holiday clothing, a woman starts to feel dizzy and tired with a quickly developing headache. Someone su g-gests that her symptoms might be from breathing something used in the shop. A substance
(a) heavy metal.
(b) halogenated hydrocarbon.
(c) radioactive hydrocarbon.
(d) safe and gentle natural compound.
Ans: (b)

Q268. Living with a person who smokes i nside a house
(a) only poses a health risk for those in the household who smoke.
(b) has not been shown to increase the health risks of nonsmokers in the home.
(c) is now known to increase the chances of cancer for everyone in the home.
(d) increases the risk of cardiovasc ular disease but not cancer for others living in the home.
Ans: (c)

Q269. London is located farther north than Toronto, yet average temperatures in Jan u-ary are higher in London than Toronto.
London tends to be warmer in January because
(a) Toronto gets more snow in January.
(b) warm ocean currents come past London.
(c) people in London burn more fossil fuels.
(d) it gets more sunshine than Toronto in Jan u-ary.
Ans: (b)

Q270. Malaria, dengue fever, and yellow fever are most common in
(a) North America.
(b) Australia and New Zealand.
(c) countries located near the equator.
(d) countries that are located nearest the poles.
Ans: (c)

Q271. Many companies have reduced their generation of toxic wastes and saved money by
(a) recycling toxic materials.
(b) using different combinations of toxic mat e-rials.
(c) purchasing toxic materials from other co m-panies.
(d) developing more on -site toxic waste sto r-age facilities.
Ans: (a)

Q272. Many people in the developing world primarily rely upon a diet of rice. Such a diet, even with plenty of rice available to meet the daily calorie requirements, runs the risk of:
(a) Malnutrition
(b) Overnourishment
(c) Undernourishment
(d) Obesity
Ans: (c)

Q273. Many people in the developing world who depend on rice in their diet suffer from diseases related to deficiencies of:
(a) Calories and vitamin D
(b) Calories and fiber
(c) Vitamin A and iron
(d) Vitamins C and E
Ans: (b)

Q274. More than any other energy source, China and the United States use:
(a) Coal to generate electricity
(b) Water power to generate electricity
(c) Nuclear plants to generate electricity
(d) Natural gas to generate electricity
Ans: (a)

Q275. More than anything else, the greatest adult mortality from infectious disease in the world can be traced to:
(a) Tuberculosis
(b) HIV
(c) Malaria
(d) Cancer
Ans: (b)

Q276. Most amphibians in North India can tolerate the warm temperatures of summer. However, during one particularly dry year, when humidity was very low and temper a-

tures were high, many of the frogs died. In this situation,
(a) temperature and humidity had synergistic and lethal effects.
(b) the frogs were pushed into their optimal habitats.
(c) the availability of food was probably the most important limiting factor.
(d) the environmental conditions were within their limits of tolerance.

Ans: (a)

Q277. Most analyses of world oil reserves indicate that short of some amazing new oil field discoveries, maximum global output of oil
(a) peaked in the 1970s.
(b) peaked in 1998.
(c) is peaking right now.
(d) will peak in the next 10–15 years.

Ans: (d)

Q278. Most jobs in the world are related to
(a) working outdoors.
(b) industrial manufacturing.
(c) mining the resources of the Earth, such as coal and iron ore.
(d) health care and education.

Ans: (a)

Q279. Most of the energy used by humans comes from which of the following sources?
(a) Geothermal power
(b) Solar energy
(c) Hydroelectric power
(d) Fossil fuels

Ans: (d)

Q280. Most of the increase in fuel efficiency of hybrid vehicles comes from
(a) charging electric batteries when decelera t-ing.
(b) charging electric batteries when cruising down the highway.
(c) enclosing most of the wheels and other ae r-odynamic designs.
(d) the use of smaller engines that produce less power and slower acceleration.

Ans: (a)

Q281. Most of the weather of the world is based upon changes in the moisture, pre s-sure, and/or temperature of the:
(a) Mesosphere
(b) Thermosphere
(c) Stratosphere
(d) Troposphere

Ans: (d)

Q282. Most oil is recovered from an oil field
(a) relying on the natural pressure of the sy s-tem.
(b) by simply pumping it out of the ground.
(c) only after using procedures that first gene r-ate pressure.
(d) pumping freshwater into the ground and making the oil float to the top.

Ans: (c)

Q283. Most organisms accumulate synthetic organic chemicals in their bodies because these chemicals
(a) are easily converted into molecules that are used to build parts of cells.
(b) are a concentrated source of minerals, needed for cellular metabolism.
(c) cannot be broken down by the natural me t-abolic mechanisms.
(d) are a major source of calories when fo od is not available.

Ans: (c)

Q284. Most organisms use water in
(a) the form of rain.
(b) liquid form.
(c) solid form.
(d) gaseous form.

Ans: (b)

Q285. Most thermometers used by students in laboratories contain alcohol, which r e-placed
(a) lead, known to cause insanity and crippling birth defects.
(b) lead, known to cause mental retardation.
(c) mercury, known to cause insanity and cri p-pling birth defects.

(d) mercury, known to cause mental retard a-tion.

Ans: (c)

Q286. Natural organic compounds typically consist of some combination of carbon, h y-drogen, and

(a) oxygen, nitrogen, phosphorus, and/or su l-fur.
(b) nitrogen, lead, mercury, and/or sulfur.
(c) sulfur, oxygen, zinc, and/or chloride.
(d) oxygen, nitrogen, sodium, and/or potass i-um.

Ans: (a)

Q287. Natural selection favours new traits that arise by

(a) mutations and crossover.
(b) increases in cell size and shape.
(c) the need to become adapted to a new env i-ronment.
(d) the demands of the environment.

Ans: (a)

Q288. Nutrients essential for plant growth are returned to the soil by

(a) decomposers.
(b) herbivores.
(c) producers.
(d) carnivores.

Ans: (a)

Q289. On a winter day, most automobiles keep the passengers warm by using heat generated by the engine. This use of the heat byproduct from a gas engine is an example of

(a) non-fossil-fuel energy.
(b) cogeneration.
(c) nuclear power.
(d) a sustainable source of energy.

Ans: (b)

Q290. On land, the carbon used today in photosynthesis to form carbon atoms of plant tissues is mostly returned to the air because of

(a) respiration in plants, animals, and orga n-isms in the soil.
(b) plate tectonics.
(c) additional photosynthesis in the same plants.
(d) erosion, decay, and general weathering.

Ans: (a)

Q291. One of the greatest risks of diarrheal disease outbreaks in industrialized countries results from

(a) poorly trained public health inspectors in the food industry.
(b) contamination in the mass production of food.
(c) the increased demand for organic products.
(d) the addition of preservatives in foods.

Ans: (b)

Q292. One of the most effective ways to r e-duce smoking in children in the India has been to

(a) raise cigarette taxes.
(b) prohibit the use of cigarettes by characters in movies and on TV.
(c) ban cigarette sales within a half -mile of schools.
(d) ban cigarette sales to people under the age of 18.

Ans: (a)

Q293. Oral Rehydration Therapy (ORT) is the process of:

(a) Continuous replacement of essential body fluids and salts in proper quantities during the attacks of diarrhoea
(b) Providing mineral water and fruit juice by railway during journey
(c) Taking saline injection
(d) None of the above

Ans: (a)

Q294. Over the next 20–30 years,

(a) global oil supplies will decline and the OPEC nations will gain importance.
(b) global oil supplies will decline and the OPEC nations will lose importance.
(c) global oil supplies will increase and the OPEC nations will gain importance.
(d) global oil supplies will increase and the OPEC nations will lose importance.

Ans: (b)

Q295. Over the past three years, 24 people living in a new residential colony develop respiratory infections and skin rashes. People living nearby in a residential colony built 30 years previously show no signs of such disease. Suspicions arise about poss
(a) a herpetologist.
(b) respiratory therapist.
(c) a virologist.
(d) a toxicologist.

Ans: (d)

Q296. Parasites
(a) affect their hosts in a density -independent manner.
(b) and their hosts represent a type of intrasp ecific competition.
(c) occur in animals but not plants.
(d) may live inside or outside of their host.

Ans: (d)

Q297. People living in cities from the late 1850s through at least the 1930s, often
(a) used electricity generated by oil and natural gas fuels.
(b) purchased wood to heat their homes.
(c) suffered respiratory diseases.
(d) rode on trains that were powered by natural gas.

Ans: (c)

Q298. People suffering from AIDS have a weakened immune system.
Because of their disease, AIDS patients are
(a) more vulnerable to the risk of nitrogen in the air.
(b) less vulnerable to the risk of bacteria in the air.
(c) more vulnerable to bacteria, which are less of a risk to healthy people.
(d) less vulnerable to any type of fungal, bacterial, or viral infection.

Ans: (c)

Q299. People with home septic systems often flush several cups of a powdered substance down their toilets every month or two to keep their systems healthy. These powdered substances most likely contain
(a) bacteria and enzymes that help break down wastes.
(b) chlorine and other disinfectants that help to prevent soil contamination.
(c) chemicals that bind to heavy metals to keep them from leaching into the soil.
(d) acids that help to clean the insides of the walls of the pipes and septic tank.

Ans: (a)

Q300. Phosphorus is NOT used by living organisms for the production of
(a) shells
(b) carbohydrates
(c) ATP
(d) teeth

Ans: (c)

Q301. Picric acid is always stored wet, often in glass bottles in water.
If the crystals dry out, they can explode! Therefore, picric acid demonstrates high levels of
(a) ignitability
(b) toxicity
(c) reactivity
(d) corrosivity

Ans: (c)

Q302. Rainwater flows quickly over a grassland, filling lazy streams and soaking deeply into the ground. Days later, vegetation near seeps grows quickly and the grassland seems to come to life.
This scene best represents which of the follo wing two loops?
(a) Precipitation loop and evapotranspiration loop
(b) Surface runoff loop and groundwater loop
(c) precipitation loop and groundwater loop
(d) Surface runoff loop and evapotranspiration loop

Ans: (b)

Q303. Reading through the long list of health effects of smoking tobacco, a student is shocked to find that smokers are inhaling

carbon monoxide. Which of the following symptoms is most related to this particular component of tobacco smoke?
(a) Shortness of breath
(b) Fibrosis of the lungs
(c) Chronic bronchitis
(d) Suppressed immune functions

Ans: (a)

Q304. Recent events indicate that where ever permission is granted to allow the sale of legally collected ivory
(a) there is no longer a market for elephant ivory.
(b) the elephant population increases.
(c) the sale of poached ivory decreases.
(d) the sale of poached ivory increases.

Ans: (d)

Q305. Some birds have been seen to consume certain soils in what is called geophagy. In some cases, the soils help the birds digest toxins that occur in their diets. These birds eating soil represent a member of the
(a) biosphere consuming a component of the lithosphere.
(b) hydrosphere consuming a component of the atmosphere.
(c) lithosphere consuming a component of the biosphere.
(d) atmosphere consuming a component of the hydrosphere.

Ans: (a)

Q306. Some drugs that are currently used with great success to treat cancer and viral infections
(a) are derived from wild plants.
(b) represent the intrinsic value of life.
(c) are derived from cultivars that combine together parts of several other plants.
(d) were discovered in the development of new cultivars of wheat.

Ans: (a)

Q307. Some milk becomes contaminated with mercury. If each of the following people consume 16 ounces of this contaminated milk each day for a month, who will most likely be impacted by this poison?
(a) An 82-year-old woman
(b) A fetus inside a mother who drinks this contaminated milk
(c) A 12-year-old girl
(d) A 51-year-old man

Ans: (b)

Q308. Steam powered airplanes
(a) were widely used until the 1970s, when jet fuel prices made other engines more efficient.
(b) are impractical because of the low power-to-weight advantage.
(c) were used for commercial air travel but were discontinued because of safety regulations.
(d) are under development and are expected to be the next phase of jet technology.

Ans: (b)

Q309. Strictly speaking about the nature of science, the Precautionary Principle as it applies to bio-safety is flawed because
(a) countries do not have the right to deny the importation of products.
(b) the tentative nature of science does not allow scientific certainty.
(c) testing the safety of bioengineered organisms is not realistic.
(d) science is not allowed to be used to direct government policy.

Ans: (a)

Q310. Subjective judgments about complex environmental phenomena often lead to
(a) the generation of new theories.
(b) the generation of new laws.
(c) controversies and unclear conclusions.
(d) new legislation and government policies.

Ans: (c)

Q311. Take a big breath of air. You have mostly inhaled
(a) nitrogen
(b) oxygen
(c) carbon dioxide
(d) water

Ans: (a)

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Q312. The 'hygiene hypothesis' suggests that asthma is the result of minimal childhood exposure to chemicals that cause asthma attacks. According to this hypothesis, exposure to allergens in childhood increases the immune systems tolerance of these relati

(a) poor families in developing countries.
(b) wealthy families in developing countries.
(c) poor families in developed countries.
(d) wealthy families in developed countries.

Ans: (a)

Q313. The air you breathe into your lungs on a daily basis mostly consists of

(a) oxygen.
(b) carbon dioxide.
(c) nitrogen.
(d) hydrogen.

Ans: (c)

Q314. The best way to address obesity is with

(a) an all-liquid diet.
(b) a balanced diet.
(c) exercise.
(d) a balanced diet and exercise.

Ans: (d)

Q315. The burners on an electric stove convert

(a) electricity into heat, which cooks the food.
(b) heat into electricity, which cooks the food.
(c) matter into heat to generate electricity that transforms the matter in food into energy.
(d) matter into electricity that generates heat that transforms the energy in food into matter.

Ans: (a)

Q316. The causes of mortality differ greatly between developing and developed countries. In developing countries, a high proportion of mortality is caused by

(a) infectious disease while in the developed world; most deaths are related to crime.
(b) poor nutrition while in the developed world; infectious disease causes most deaths.
(c) wars and accidents while in the developed world; most deaths are related to infectious disease.
(d) infectious disease while in the developed world; most deaths are related to voluntary behaviours.

Ans: (d)

Q317. The Centers for Disease Control employs many people who study epidemiology. These people might be interested in

(a) identifying new types of infectious disease.
(b) the prevention of infectious disease.
(c) the worldwide distribution of infectious disease.
(d) identifying, tracking the spread of, and preventing infectious disease.

Ans: (d)

Q318. The chemistry professor warned the students that you never store acids in metal containers because acids demonstrate a high level of

(a) ignitability.
(b) toxicity.
(c) reactivity.
(d) corrosivity.

Ans: (d)

Q319. The common definition of pest

(a) is based upon the negative impacts of an organism on human activities.
(b) varies depending upon whether the organism is an herbivore or carnivore.
(c) varies widely in the world depending upon the particular culture.
(d) is limited to organisms that are plants.

Ans: (a)

Q320. The complete combustion of fossil fuels and refuse produces

(a) radon and carbon monoxide.
(b) volatile organic compounds.
(c) sulfuric acid and nitric acid.
(d) carbon dioxide and water vapour.

Ans: (d)

Q321. The concern about human -to-human transmission of bird flu is most closely monitored by
(a) the national governments of the countries of the world.
(b) the World Health Organization and the Centers for Disease Control.
(c) World Wide Institute for Infectious Di s-ease.
(d) International Centers for Health and H u-man Disease.

Ans: (b)

Q322. The dis sipation of energy during its transmission from one trophic level to a n-other is in agreement with:
(a) First law of thermodynamics
(b) Second law of thermodynamics
(c) Third law of thermodynamics
(d) None of above

Ans: (c)

Q323. The early Industrial Revolution pr i-marily relied on fossil fuels to
(a) run gasoline engines.
(b) run power plants that generated electricity.
(c) generate steam.
(d) generate heat and electricity.

Ans: (c)

Q324. The economic gap between develo p-ing and industrialized countries may best be narrowed by
(a) the adoption of democratic forms of go v-ernment in developing countries.
(b) industrialized countries increasing shi p-ments of food supplies to developing countries.
(c) industrialized countries harvesting more natural resources in developing countries.
(d) stabilizing population growth in developing countries.

Ans: (d)

Q325. The fossil fuels are considered non -renewable sources of energy because
(a) their formation is so slow.
(b) they release carbon dioxide when they are burned.
(c) people are cutting down too many forests to allow trees to turn into coal.
(d) carbon dioxide levels in the atmosphere are too low to allow fossil fuels to form.

Ans: (a)

Q326. The greatest cultural risk to health in most developing countries is
(a) lack of exercise.
(b) poor nutrition.
(c) the use of tobacco.
(d) consumption of alcohol.

Ans: (c)

Q327. The greatest public health concerns about the H5N1 bird flu virus is that it will
(a) be spread from one bird to another.
(b) be spread from birds to people.
(c) spread out of the country of Australia.
(d) spread from person to person.

Ans: (b)

Q328. The greatest risk of death from an infectious disease for people living in north-ern Europe and Asia is most likely
(a) tetanus.
(b) measles.
(c) tuberculosis.
(d) hepatitis.

Ans: (c)

Q329. The H1N1 swine flu pandemic of 2009-2010 resulted in the immunization of millions of people. When the immunizations were first available, people under 25 or over 65 were given priority. This was done b e-cause H1N1
(a) was a hazard to people in these age groups, and only these people were vulnerable to infec-tion.
(b) was a hazard to people in these age groups, and these people were most vulne rable to i n-fection.
(c) was not a hazard to these people, but they were most vulnerable to infection.
(d) vaccines only worked on people in these age groups.

Ans: (b)

Q330. The heavy reliance upon coal from the late 1800s through the 1940s was most apparent to anyone standing outside in
(a) rural environments far away from cities.
(b) large industrialized cities.
(c) seaports that relied on fishing.
(d) a region that relied on logging and the ti m-ber industry.
Ans: (b)

Q331. The industrial revolution has led to an increased reliance on fossil fuels to
(a) power farm machinery.
(b) power farm machinery and to produce fertilizers.
(c) power farm machinery and to produce fertilizers and pesticides.
(d) develop new types of crops.
Ans: (a)

Q332. The infectious diseases that cause the greatest mortality in the world are
(a) tuberculosis, meningitis, and dengue.
(b) syphilis, hepatitis, and herpes.
(c) trypanosomiasis, intestinal roundworms, and tuberculosis.
(d) acute respiratory infections, diarrhoea, and HIV/AIDS.
Ans: (d)

Q333. The information of an energy pyr a-mid reveals that
(a) it is expensive and inefficient to get most of your dietary calories from meats.
(b) it is expensive and inefficient to get most of your dietary calories from grains.
(c) consumers at lower trophic levels do not have as many calories as consumers at higher trophic levels.
(d) consumers at higher trophic levels are us u-ally more abundant than consumers at lower trophic levels.
Ans: (a)

Q334. The Law of Conservation of Matter reveals why recycling is an essential compo-nent of
(a) biogeochemical cycles.
(b) thermal cycles.
(c) nuclear energy cycles.
(d) solar radiation cycles.
Ans: (c)

Q335. The levels of mercury are low in the fish eaten almost daily by people living near an ocean. For these people, bioaccumulation means that
(a) people eliminate most of the mercury they consume after a single day.
(b) mercury builds up in the fish and not the people.
(c) mercury accumulates in their bodies after many years.
(d) mercury and other heavy metals accum u-late in the bottom of the ocean and not in the fish they eat.
Ans: (c)

Q336. The most cleanly burning fossil fuel available is
(a) coal, usually found in depos its deep within the Earth.
(b) kerosene, found in deposits associated with oil wells.
(c) natural gas, usually found in deposits ass o-ciated with oil.
(d) nuclear energy, produced from rocks and minerals within the Earth.
Ans: (c)

Q337. The most effect way that malaria can be reduced in a region is using
(a) vector control to treat infections and trea t-ment strategies to prevent infections.
(b) vector control to prevent infections and treatment strategies to treat infections.
(c) antiviral medicines to reduce fevers and prevent disease transmission.
(d) better hygiene, improved sanitation pra c-tices, and uncontaminated sources of water.
Ans: (b)

Q338. The most possible cause of tension, headache, high blood pressure, loss of co n-centration and loss of hearing abilities is
(a) water pollution.
(b) air pollution.
(c) noise pollution.

(d) pesticide pollution.

Ans: (c)

Q339. The process of converting nitrogen gas to ammonium is called
(a) evaporation.
(b) sublimation.
(c) nitrogen fixation.
(d) biogeochemical processing.

Ans: (c)

Q340. The rise of tuberculosis in the past few decades is largely the result of
(a) the evolution of antibiotic resistance and increases in HIV infections.
(b) more people moving to large cities, living more closely together.
(c) the increased use of genetically engineered crops and drugs.
(d) the spread of mice and rats across the globe, carrying the disease.

Ans: (a)

Q341. The thinning of the troposphere away from the equator is primarily a result of
(a) land masses moving towards the poles.
(b) shifting of the continental plates due to plate tectonics.
(c) differences in solar energy striking the Earth.
(d) the number of clouds in the mesosphere and thermosphere.

Ans: (c)

Q342. The Three Gorges Dam
(a) is the centerpiece of the Chinese gover n-ment's efforts to join the modern, industrial age.
(b) will require the relocation of 4 -5 million people.
(c) is the largest hydroelectric project in the world.
(d) All of the above.

Ans: (d)

Q343. The two highest levels of the atmo s-phere contain only small amounts of oxygen, nitrogen, and ozone. These layers are the
(a) mesosphere and thermosphere.
(b) thermosphere and stratosphere.
(c) stratosphere and troposphere.
(d) thermosphere and troposphere.

Ans: (a)

Q344. The two largest dam-reservoirs which were planned to be constructed on river Narmada are
(a) Sardar Sarovar and Narmada Sagar.
(b) Sardar Sarovar and Nagarjuna Sagar.
(c) Narmada Sagar and Nagarjuna Sagar.
(d) Narmada Dam and Sardar Dam.

Ans: (b)

Q345. The United States uses much more oil than it produces.
Therefore, the United States is dependent upon other countries to meet its energy needs. Ho w-ever, much of this trade imbalance is offset by the exportation of large quantities of
(a) automobiles.
(b) grains.
(c) palm oil, spices, and cocoa.
(d) household goods (TVs, dishwashers, fu r-naces, etc.).

Ans: (a)

Q346. The use of enhanced recovery by an oil company
(a) primarily depends upon the current market price of oil.
(b) is usually more cost effective than recove r-ing oil using secondary recovery.
(c) has not yet been used because oil reserves remain abundant.
(d) is now routine, as every bit of oil is extrac t-ed from all available wells.

Ans: (a)

Q347. The WHO 2002 conclusion on the importance of risk assessment in modern medicine was most like the proverb
(a) actions speak louder than words.
(b) there is safety in numbers.
(c) an ounce of prevention is worth a pound of cure.
(d) do unto others as you would have them do unto you.

Ans: (c)

Q348. Throughout the world, smoking is
(a) increasing in the developed world.
(b) decreasing in the developed world.
(c) increasing the fastest in the developed world.
(d) nearly gone in the developing world, because of the cost of cigarettes.
Ans: (a)

Q349. Treating malaria with drugs is difficult because
(a) no drug has yet been found that effectively treats malaria.
(b) the malarial parasite has quickly evolved drug resistance.
(c) it is very difficult to distribute drugs to regions affected by malaria.
(d) the best drugs cost thousands of dollars per person.
Ans: (b)

Q350. Trees undergoing photosynthesis in a mature forest can best be described as
(a) primary producers.
(b) chemoautotrophs.
(c) secondary consumers.
(d) heterotrophs.
Ans: (a)

Q351. Two major approaches to non-fossil-fuel energy alternatives are renewable energy and
(a) nuclear power.
(b) geothermal.
(c) wind energy.
(d) solar energy.
Ans: (a)

Q352. Ultimately, the sunlight energy that strikes Earth is
(a) lost into space.
(b) stored in molecules that are located deep within the Earth.
(c) stored in minerals and rocks deep within the oceans.
(d) converted to potential energy and stored in animals and plant tissues forever.
Ans: (a)

Q353. If the Millennium Development Goals are achieved by 2015
(a) at least 30 developing countries will move into the developed category.
(b) more than 400 million people will be lifted out of extreme poverty.
(c) the population of the world will stop increasing.
(d) people in the developing world will all have basic medical coverage.
Ans: (b)

Q354. In general, countries that enjoy the best health have
(a) the warmest climates.
(b) diets primarily based on eating grains.
(c) the largest families.
(d) good educational systems.
Ans: (d)

Q355. Over the past 50 years, global life expectancy has
(a) decreased by about 5 years, primarily because of the increase in viral infections.
(b) stayed about the same, because of new diseases spread by global climate change.
(c) risen about 5 years because of the development of many poor nations.
(d) risen more than 20 years because of better health care and nutrition worldwide.
Ans: (d)

Q356. Globally, genetically modified crops are being used
(a) increasingly in developed nations but rarely in developing nations.
(b) increasingly in developing nations but rarely in developed nations.
(c) increasingly in developing and developed nations.
(d) less in developing and developed nations.
Ans: (a)

Q357. How was agriculture changed about 300–500 years ago?
(a) New fertilisers were developed that greatly increased productivity.

(b) Widespread use of ploughing caused tr e-mendous degradation of soils.
(c) New crops and animals were introduced from distant lands.
(d) Human populations became more depen d-ent on sea foods.

Ans: (c)

Q358. In a greenhouse, it would be best to position a plant so that its exposure to su n-light would be
(a) within its limits of tolerance.
(b) within its optimal range.
(c) at its zones of stress.
(d) at the photosynthetic limit.

Ans: (b)

Q359. Integrated pest management focuses on
(a) eliminating crop damage by using preve n-tative techniques.
(b) eliminating crop damage by using only cu l-tural techniques.
(c) maintaining crop damage below the ec o-nomic threshold using preventative techniques.
(d) maintaining crop damage below the ec o-nomic threshold using broad -spectrum pest i-cides.

Ans: (c)

Q360. Marker-assisted breeding allows
(a) desired bacterial genes to be inserted into crops.
(b) beneficial animal genes to be inserted into crops.
(c) crop improvements without resorting to transgenic traits.
(d) plants that have been bioengineered to be easily identified in the field.

Ans: (c)

Q361. Most of the wheat, rice and corn raised in the world has resulted from genet-ic engineering of one sort or another, either by crossing certain varieties or deliberately transferring genes using transgenic tec h-niques. These methods select for plants t
(a) cultural control.
(b) natural enemies control.
(c) genetic control.
(d) natural chemical control.

Ans: (c)

Q362. Over the past 200 years, the greatest change in agriculture is the
(a) productivity of an acre of farmland.
(b) elimination of global hunger and malnutr i-tion.
(c) production of insect-resistant crops.
(d) declining reliance on fertilisers for crops.

Ans: (a)

Q363. Part of the Green Revolution, some varieties of the wheat plant was specially selected because of its ability to
(a) produce high yields of grain.
(b) resist prolonged droughts.
(c) naturally produce pesticides.
(d) produce grain with high levels of iron.

Ans: (a)

Q364. Plants that can best resist a variety of environmental challenges are most likely
(a) domesticated plants with little genetic var i-ation.
(b) cultivars with little genetic variation.
(c) wild plants with high degrees of variation.
(d) wild plants with low degrees of variation.

Ans: (c)

Q365. Some farmers rotate their crops from year to year, switching from soybeans to corn on the same fields. What is one of the advantages of doing this?
(a) Soybeans add large amounts of carbon d i-oxide to the soil, which helps the corn crop.
(b) Both crops require the same fertilising su p-plies, so farmers save by buying fertiliser in bulk.
(c) Corn adds large am ounts of phosphorus to the soil, which helps the soybeans crop.
(d) The corn crop benefits from reactive nitr o-gen added to the soil by the soybeans crop.

Ans: (d)

Q366. Subsistence farming
(a) existed worldwide prior to the industrial revolution.

(b) has resulted in the development of fewer large farms.
(c) was eliminated worldwide by the Green Revolution.
(d) depends heavily on the use of fossil fuels.

Ans: (c)

Q367. The evolution of pesticide resistance, resurgence and secondarypest outbreaks are only some of the problems that result from reliance on

(a) crop rotation and biological controls, which disrupt the natural dynamics of ecosystems.
(b) pesticides, creating the need to alternate between a pesticide and an herbicide every other year.
(c) rodenticides to kill weeds and insect pests and prevent the spread of viral diseases.
(d) pesticides, creating a never -ending pest i-cide treadmill requiring new pest -fighting strategies.

Ans: (d)

Q368. The greatest potential for developing new types of agricultural crops depends u p-on

(a) bioengineering new combinations of wheat and rice.
(b) grafting together different plants into one new type of plant, such as a plant with tom a-toes and sweet potato roots.
(c) thousands of plant species that occur only in the wild.
(d) our ability to identify and culture new types of animal pollinators.

Ans: (c)

Q369. The Green Revolution continues t o-day as

(a) farmers increasingly rely upon sustainable agricultural methods.
(b) the harvest of shade-grown coffee and rain-forest nuts and fruits increases.
(c) the global amount of land used to raise crops continues to decline.
(d) new high-yielding crops are developed and used.

Ans: (d)

Q370. The single greatest threat to irrigated agriculture is

(a) groundwater depletion.
(b) global warming.
(c) flooding.
(d) None of the above.

Ans: (a)

Q371. The spread of Integrated Pest Ma n-agement (IPM) continues because

(a) traditional methods using pesticides are being outlawed.
(b) IPM eliminates pests completely and does not create pesticide resistance.
(c) the benefits of IPM are many and the costs are greatly reduced.
(d) government regulations worldwide are mandating these techniques.

Ans: (c)

Q372. Troubled by weeds that conti nue to grow on the passage to his house, a man d e-cides to stop pulling the weeds and instead use

(a) a herbicide.
(b) a fungicide.
(c) a pesticide.
(d) a rodenticide.

Ans: (a)

Q373. Which of the following is NOT one of the processes associated with the Green Revolution?

(a) A change from traditional mixed crops to mono crops
(b) Intensive applications of such inputs as water, fertilisers and pesticides
(c) A reduction in the use of hybrid seeds
(d) Further increases in the intensity of agricul-ture by red uction in the fallow of field -resting time between seasonal crops

Ans: (c)

Q374. What are the key elements of the first stage of the Green Revolution?

(a) Mixed crop fields of high -yield rice, wheat and corn; increased use of water, fertilisers and pesticides; reduction of the field -resting time between crops

(b) Monocrop fields of rice, wheat and corn; increased use of water, fertilisers and pesticides; reduction of the fieldresting time between crops
(c) Monocrop fields of high -yield rice, wheat and corn; increased use of water, fertilisers and pesticides; increase in the field -resting time between crops
(d) Monocrop fields of high -yield rice, wheat and corn; increased use of water, fertilisers and pesticides; reduction of the field -resting time between crops

Ans: (d)

Q375. How does the second stage of the Green Revolution differ from the first stage?
(a) The second stage adds new types of fast -growing wheat and rice specifically bred for tropical and sub-tropical climates.
(b) The second stage emphasises new planting and harvesting equipment.
(c) The second stage introduces 'fertigation,' which combines irrigation and fertilisers in a single step.
(d) The second stage promotes multiple crop production, rather than single crop.

Ans: (a)

Q376. What have been the results of the Green Revolution?
(a) A complete success in terms of increased food production, with no unintended consequences
(b) A failure in terms of the effect on food production
(c) A success in terms of increased food production and environmental outcomes, but with social costs
(d) A success in terms of increased food production, but with both environmental and social costs

Ans: (d)

Q377. Which of the following is NOT one of environmental costs associated with the Green Revolution?
(a) Farmers without money were unable to benefit from the Green Revolution
(b) Increased use of fossil fuels
(c) Damage to habitat and wildlife from diversion of natural rivers and streams for irrigation
(d) Pollution of rivers and other water sources by runoff carrying farm chemicals

Ans: (a)

Q378. Which of the following is a social cost associated with the Green Revolution?
(a) Financial costs to farmers participating in the Green Revolution is higher than with traditional farming.
(b) People without access to loans or family support cannot participate in the Green Revolution.
(c) Traditional farmers cannot compete against Green Revolution farmers in the regional marketplace.
(d) All of the above.

Ans: (d)

Q389. In 1984, the worst gas tragedy in India took place in:
(a) Bengaluru
(b) Mumbai
(c) Bhopal
(d) Patna

Ans: (b)

Q390. In Chipko Movement:
(a) Women were protesting against replacement of mixed forest by commercially valuable pine tree
(b) Women were protesting against alcoholic husbands
(c) Garhwali women were protesting against atrocities of contractors
(d) It is a movement against corrupt political leaders

Ans: (d)

Q391. In general, government oversight and regulation have resulted in
(a) more restrictions on pesticide use in the past few years.
(b) fewer restrictions on pesticide use in the past few years.

(c) more restrictions on herbicide use but fewer restrictions on insecticide use in the past few years.
(d) more restrictions on insecticide use but fewer restrictions on herbicide use in the past few years.

Ans: (c)

Q392. In India, Control of air pollution is protected by:
(a) Forest Act.
(b) Police Act.
(c) Environmental Pollution Act.
(d) Wildlife Act.

Ans: (c)

Q393. Iron ore mining companies are e x-panding into the deep forest of Orissa where native populations of indigenous people have lived off the land for many centuries. In order to resolve the growing conflicts be-tween the natives and the mining comp a-nies,
(a) the depletion of iron ore from the ground.
(b) the shift from logging to mining.
(c) sources of freshwater.
(d) the construction of new roads.

Ans: (d)

Q394. ISO 14000 is a series
(a) of international standards on environmental management tools and systems.
(b) of international standards on quality ma n-agement tools and systems.
(c) of international standards on environmental and quality management tools and systems replacing ISO 9000 series.
(d) all of the above.

Ans: (a)

Q395. Ramsar Convention 1971 aimed at the conservation of
(a) Wasteland.
(b) Wetland.
(c) Desert.
(d) All of the above.

Ans: (b)

Q396. The lessons of water management in Darewadi, India reveal the
(a) positive changes that can result from proper watershed management.
(b) possible consequences of overusing an a q-uifer.
(c) risks of dumping sewage too close to a w a-ter supply.
(d) long-term consequences of industrialisation in rural villages.

Ans: (a)

Q397. The names of Baba Amte and Medha Patkar are associated with which of the pro-test movements of India?
(a) Silent Valley Movement.
(b) Narmada Bachao Andolan.
(c) Chipko Movement.
(d) All of the above.

Ans: (b)

Q379. Which of the following is NOT a s o-cial cost associated with the Green Revolu-tion?
(a) Financial costs to farmers participating in the Green Revolution is higher than with trad i-tional farming.
(b) Pollution of rivers and other water sources by runoff carrying farm chemicals
(c) People without access to loans or family support cannot partici pate in the Green Rev o-lution.
(d) Traditional farmers cannot compete against Green Revolution farmers in the regional ma r-ketplace.

Ans: (c)

Q380. Which of the following is an env i-ronmental cost associated with the Green Revolution?
(a) Increased use of fossil fuels.
(b) Damage to habitat and wildlife from dive r-sion of natural rivers and streams for irrigation.
(c) Pollution of rivers and other water sources by runoff carrying farm chemicals.
(d) All of the above.

Ans: (c)

Q381. How much of the world's annual oil output does Green Revolution agriculture consume?
(a) 1%
(b) 5%
(c) 10%
(d) 15%

Ans: (a)

Q382. As a result of the lessons learned from the disaster in 1984 Bhopal, India, the 1986 EPCRA requires
(a) all companies handling toxic wastes to be located at least one mile from any city border.
(b) emergency response teams in every co m-pany that makes a product in the United States.
(c) companies that handle more than 5 tonnes of hazardous materials to provi de detailed i n-formation to local emergency planning co m-mittees.
(d) All of the responses are correct.

Ans: (a)

Q383. As cities in India grow, they are fin d-ing that the increased water demands are best addressed by
(a) building more reservoirs.
(b) drilling more wells.
(c) building desalination plants.
(d) conservation measures.

Ans: (c)

Q384. Chipko Movement was held in
(a) Uttar Pradesh
(b) Assam
(c) Karnataka
(d) Kerala

Ans: (c)

Q385. Chipko Movement is:
(a) A movement of political strength
(b) An environmental movement
(c) A movement for independence
(d) None of the above.

Ans: (a)

Q386. Environmental Impact Assessment (EIA):
(a) Should be made compulsory for starting a developmental project.
(b) Should not be made compulsory for star t-ing a developmental project.
(c) Should be done after completion of a d e-velopmental project.
(d) None of the above.

Ans: (b)

Q387. An environmental planning organis a-tion out of the following is:
(a) ICAR
(b) NEERI
(c) NCO
(d) NPO

Ans: (a)

Q388. First international convention on e n-vironment was held in:
(a) New Delhi
(b) New York
(c) Stockholm
(d) Geneva

Ans: (a)

Q
(a) Both *(A)* and *(R)* are true and *(R)* is the cor-rect explanation of *(A)*
(b) Both *(A)* and *(R)* are true but *(R)* is not cor-rect explanation of *(A)*
(c) *(A)* is true but R is false
(d) *(A)* is false but R is true

Ans: (c)

Q409. If the EIA indicated that another state is likely to be affected, the state in which EIA is planned hast to:
(a) Transmit to the affected state any relevant information from the EIA concerning it.
(b) Keep the relevant information fully secret
(c) Handover the information to the central pollution control board

Ans: (b)

Q410. Which one of the following is the broadest category?
(a) Landscape
(b) Ecotone
(c) Ecosystem

(d) Biome

Ans: (d)

Q411. Which one of the following is the broadest level of classification?
(a) Class
(b) Phylum
(c) Order
(d) Family

Ans: (d)

Q412. Which one of the following stat e-ments best reflects the overall position of current science on the role of biodiversity in ecosystems?
(a) The more species in an ecosystem, the greater the biomass production.
(b) The more species in an ecosystem, the greater the drought resistance.
(c) The effects of biodiversity on the functio n-ing of an ecosystem are not consistent.
(d) Almost every species in an ecosystem is essential to maintain the overall ecosystem.

Ans: (b)

Q413. In which of the following areas do international environmental treaties exist?
(a) Whaling
(b) Ocean pollution
(c) Fisheries
(d) All of the above

Ans: (a)

Q414. Match the following people to their correct role.
List I List II
A. Ecotourists 1. will enforce and review envi-ronmental standards; independently assess compliance and initiate enforcement against polluters
B. Environmental Protection Agents
2. indi
(a) Sambar Lake.
(b) Dal Lake.
(c) Ansupa Lake.
(d) Dimna Lake.

Ans: (c)

Q399. Which one of the following is not a Ramsar site?
(a) Bhitarkanika Mangroves.
(b) Chilika Lake.
(c) Deepor Beel.
(d) None of the above.

Ans: (b)

Q400. Which act deals with protecting and improving the nation's air quality and the stratospheric ozone layer?
(a) Resource Conservation and Recovery Act.
(b) Environment Policy Act.
(c) National Environmental Policy Act.
(d) Clean Air Act.

Ans: (a)

Q401. To generate environmental awar e-ness, Paryavaran Vahini Scheme was launched in
(a) 1998
(b) 1968
(c) 1992
(d) 1994

Ans: (a)

Q402. In Water (Prevention and Control of Pollution) Act 1974 industries are allowed to release waste in inland water having BOD level.
(a) 100 mg/l
(b) 30 mg/l
(c) 150 mg/l
(d) 80 mg/l

Ans: (a)

Q403. How many sites as potential area for biosphere reserves have been identified by the National MAB Committee for the De-partment of Environment?
(a) 13
(b) 23
(c) 33
(d) 43

Ans: (a)

Q404. Environmental impact assessment is mandatory for certain development project under one of the following legislation

(a) the Factories Act.
(b) forest Act.
(c) Environment (Protection) Act.
(d) Air (Pollution and Control) Act.

Ans: (d)

Q405. In India, Air (Prevention and Control of Pollution) Act came into being in which year?
(a) 1974
(b) 1981
(c) 1978
(d) 1990

Ans: (b)

Q406. Assertion (A): Cost-Benefit Analysis is an important tool in Environmental I mpact Assessment.
Reason (R): It evaluates the likely return on capital inputs in a project.
(a) Both (A) and (R) are true and (R) is the correct explanation of (A)
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A)
(c) (A) is true but (R) is false
(d) (A) is false but (R) is true

Ans: (c)

Q407. Environmental Impact Assessment (EIA) seeks to achieve goals pertaining to:
(a) Sustainable Development
(b) Prevention of Pollution only
(c) Conservation of resources only
(d) Social Benefit

Ans: (d)

Q408. Assertion (A): Environmental Audit is an important aspect of Post-project analysis Reason (R): It helps in assessment of compliance with environmental regulatory requirements.
Codes:
A B C D D
(a) 3 1 5 2 4
(b) 1 3 4 2 5
(c) 3 1 5 4 3
(d) 2 1 3 4 5

Ans: (a)

Q415. Zeitgeber means:
(a) Time giving.
(b) Photoperiod information.
(c) Temperature information.
(d) Rainfall information.

Ans: (b)

Q416. Thermoclines of a lake mean:
(a) The upper layer with well -lit, well -mixed and relatively having warm water.
(b) The intermediate layer in which a rapid decline in temperature occurs with depth.
(c) The deep layer which is generally cold and dark.
(d) The bottom layer.

Ans: (b)

Q417. Fo r the detection of polyaromatic (PAH) which of the following instruments is used?
(a) Atomic Absorption Spectrophotometer.
(b) X-ray Diffractometer.
(c) Gas Chromatograph.
(d) Flame photometer.

Ans: (c)

Q418. Match the items in List I with List II and select the correct answer using codes given below:
List I (Date) List II (Event)
A. Montreal Convention (i) Ozone depletion
B. Rio Summit (ii) Greenhouse gas
C. Ramsar Convention (iii) Convention on B i-ologi
(a) (iii) (ii) (i) (iv)
(b) (iv) (iii) (i) (ii)
(c) (i) (iii) (iv) (ii)
(d) (i) (ii) (iv) (iii)

Ans: (c)

CHAPTERWISE PRACTICE

Ecosystem Basics

LEVEL-1

Q1. Which of the following is correct r e-garding the ecosystem?

(a) primary consumers are least dependent upon pr o-ducers
(b) primary consumers out-number producers
(c) producers are more than primary consumers
(d) secondary consumers are the largest and most po w-erful.

Ans: (c)

Q2. Homeostasis is

(a) tendency of biological systems to change with change in environment
(b) tendency of biological systems to resist change
(c) disturbance of self regulatory system and natural controls
(d) biotic materials used in homeopathic medicines.

Ans: (b)

Q3. Food chain in which microorganisms breakdown the food formed by primary producers is

(a) parasitic food chain
(b) detritus food chain
(c) consumer food chain
(d) predator food chain.

Ans: (b)

Q4. If we completely remove the decompo s-ers from an ecosystem, its functioning will be adversely affected because of:

(a) mineral movement will be blocked
(b) the rate of decomposition will be very high
(c) energy flow will be blocked
(d) herbivores will not receive solar energy.

Ans: (a)

Q5. The abundance of a species population, within its habitat, is called:

(a) relative density
(b) regional density
(c) absolute density
(d) niche density.

Ans: (d)

Q6. The primary succession refers to the development of communities on a:

(a) forest clearing after devastating fire
(b) newly-exposed habitat with no record of earlier ve g-etation
(c) freshly cleared crop field
(d) pond, freshly filled with water after a dry phase.

Ans: (b)

Q7. Which of the following pairs is correctly matched?

(a) parasitism – intra-specific relationship
(b) uricotelism – aquatic habitat
(c) excessive perspiration – xeric adaptation
(d) stream lined body – aquatic aduptation.

Ans: (d)

Q8. The 'niche' of a species is meant for

(a) habitat and specific functions of a species
(b) specific place where an organism lives
(c) specific species function and its competitive power
(d) none of these.

Ans: (a)

Q9. Certain characteristic demographic d e-veloping countries are:

(a) high fertility, low or rapidly fall rate, rapid popul a-tion growth and age distribution
(b) high fertility, high density, mortality rate and a very young age
(c) high infant mortality, low fertility population growth and a very distribution
(d) high mortality, high density, uneven growth and a very old age distribution.

Ans: (a)

Q10. What is a keystone species?

(a) a species which makes up only a small proportion of the total biomass of a community, yet has a huge impact community's organization and s
(b) a common species that has plenty of biomass yet has a fairly low impact on the community organization
(c) a rare species that has minimal impact on the bi o-mass and on other species in the community
(d) a dominant species that constitutes a large propo r-tion of the biomass and which affects many other sp e-cies.

Ans: (a)

Q11. The population of an insect species shows an explosive increase in numbers during rainy season followed by its disap-pearance at the end of the season. What does this show?

(a) the food plants mature and die at the end of the rainy season
(b) its population growth curve is of J-type
(c) the population of its predators increases enormously
(d) S-shaped or sigmoid growth of this insect.

Ans: (b)

Q12. Which one of the following statements is correct?

(a) Both Azotobacter and Rhizobium fix atmospheric nitrogen in root nodules of plants.
(b) Cyanobacteria such as Anabaena and Nostoc are important mobilizers of phosphates and for plant nutrition in soil
(c) At present it is not possible to grow maize without chemical fertilizers
(d) Extensive use of chemical fertilizers may lead to eutrophication of nearby water bodies.

Ans: (d)

Q13. Atmospheric nitrogen is converted to nitrogen oxides

(a) when fossil fuels are burned at high combustion temperatures.
(b) if the sun is shining brightly and there is a temperature inversion.
(c) on cloudy days when carbon and soot levels are unusually high.
(d) if radon gas is present when gasoline is burned in automobiles.

Ans: (a)

Q14. Having covered millions of acres of grasslands, the toxic weed leafy spurge has caused serious damage to the lower regions of Himachal. Being toxic in nature it is avoid by both cattle and horses alike. Leafy spurge has spread completely across many neighboring states of Uttaranchal. If left uncontrolled in these states, leafy spurge populations will:

(a) keep growing indefinitely.
(b) reach their carrying capacity.
(c) shift from a S-curve to a constant rate of growth.
(d) shift from an S-shaped curve to a J-shaped growth curve.

Ans: (b)

Q15. Some beetles escape from a ship and fly to a small island covered with grass but with no trees or beetle predators.

As the beetles feed, they destroy all the grasses. But with abundant food, the beetle population soars, doubling in size every month. After about a year, the population crashes as thousands of beetles have destroyed almost all of the plants and there is little left to feed the large population. This scenario best illustrates

(a) constant growth followed by equilibrium.
(b) a population that has stabilized near its carrying capacity.
(c) exponential growth followed by a population crash.
(d) logistic growth ending at its carrying capacity.

Ans: (c)

Q16. Which of the following is NOT true regarding biotic potential?

(a) Environmental resistance factors such as disease and available space can prevent a population from maximizing its biotic potential
(b) The biotic potential is the average rate of growth of a population over time
(c) The ratio of males to females in a population is a characteristic that is used to determine biotic potential
(d) The number of individuals of reproductive age in a population is a parameter used to determine biotic potential.

Ans: (b)

Q17. Which one of the following statements about the carbon, phosphorus, and nitrogen cycles is true ?

(a) The major source of carbon used by plants is the soil
(b) The major source of nitrogen used by plants is the air.
(c) Phosphorus has no atmospheric component.
(d) Bacteria drive the phosphorus cycle.

Ans: (c)

Q18. Synecology deals with

(a) Ecology of many species
(b) Ecology of many populations
(c) Ecology of community
(d) None of these

Ans: (c)

Q19. Ecotype includes a type of species in which are environmentally induce variations are:

(a) Temporary
(b) Genetically not related
(c) Genetically fixed
(d) None of the Above

Ans: (b)

Q20. Humans often manipulate the environment in ways that decrease the overall ecosystem capital because

(a) short term gains are often local while long -term losses in regulating and cultural services are experienced regionally.
(b) short term gains are often regional while longterm losses in regulating and cultural services are experienced locally.
(c) long term gains are often local while short term losses in regulating and cultural services are experienced regionally.
(d) long term gains are often regional while shortterm losses in regulating and cultural services are experienced locally.

Ans: (a)

Q21. Primary productivity of the open oceans is very limited because of:

(a) the shortage of water.
(b) the shortage of light.
(c) the shortage of nutrients.
(d) low temperature.

Ans: (c)

Q22. The economic gap between developing and industrialized countries may best be narrowed by

(a) the adoption of democratic forms of government in developing countries.
(b) industrialized countries increasing shipments of food supplies to developing countries.
(c) industrialized countries harvesting more natural resources in developing countries.
(d) stabilizing population growth in developing countries.

Ans: (d)

Q23. The term Biocoenosis was proposed by

(a) A G Tansley
(b) Karl Mobius
(c) R H Whittaker
(d) Robert Hooke

Ans: (b)

Q24. Biomes with permafrost are most likely:

(a) covered in coniferous forests at high latitudes.
(b) in temperate zones with deciduous trees.
(c) located near the poles and without any trees.
(d) located at high altitudes nearest the equator.

Ans: (c)

Q25. Consumers that eat plants rely upon:

(a) chemical energy stored in organic molecules produced by photosynthesis.
(b) kinetic energy stored in organic molecules produced by photosynthesis.
(c) photosynthesis to convert potential energy to kinetic energy.
(d) entropy to generate heat to drive kinetic processes in their bodies.

Ans: (a)

Q26. Species that occur in different geographical regions separated by special barrier are:

(a) Allopatric
(b) Sympatric
(c) Sibling
(d) None of the Above

Ans: (a)

Q27. Deciding to use a natural enemies approach to control the mites that infect her crops, a farmer purchases 10,000 ladybugs in the spring and spreads them over her 100 acre fields. This represents the use of natural:

(a) predators
(b) parasitoids
(c) pathogens
(d) plant-eaters

Ans: (a)

Q28. Deep in the ocean off the shore of Japan, are communities nestled around hydrothermal vents where super heated water, springs from the bottom of the ocean. No sunlight ever penetrates to these deep regions. In these communities, bacteria have special enzymes that allow them to form organic matter by chemosynthesis. These communities frequently have worms, clams, shrimp, and many other organisms clustered together. In such a system, fish feed on shrimp that feed on the bacteria.

This food chain represents a:

(a) tertiary consumer eating a secondary consumer eating a primary consumer.
(b) primary consumer eating a secondary consumer eating a tertiary consumer.
(c) consumer eating a producer which then consumes chemoautotrophic bacteria.
(d) secondary consumer eating a primary consumer which then eats a producer.

Ans: (d)

Q29. Density -independent factors such as earthquakes and hurricanes are:

(a) abiotic factors that maintain a population near equ i-librium.
(b) biotic factors that maintain a population near equ i-librium.
(c) abiotic factors that are not involved in maintaining a population near its equilibrium.
(d) biotic factors that are not involved in maintaining a population near its equilibrium.

Ans: (c)

Q30. Developing a new form of ecological pest contr ol, researchers engineer crops to produce the pheromones of the pest. The crops now produce the pest pheromone, overwhelming the fields and causing the male pests to fail to find a mate. This new form of ecological pest control combines:

(a) natural enemies and cultural control.
(b) cultural and natural enemies control.
(c) genetic and cultural control.
(d) genetic and natural chemical control.

Ans: (d)

Q31. Dung beetles feeding on the waste of cattle, grazing on hay in a field, represent:

(a) a decomposer feeding on the wastes of a consumer eating a producer.
(b) a producer feeding on the wastes of a producer ea t-ing a consumer.
(c) a producer feeding on the wastes of a consumer ea t-ing a producer.
(d) a consumer feeding on the wastes of a decomposer eating a producer.

Ans: (a)

Q32. Ecosystem sustainability primarily results from the:

(a) relationships between the organisms in an ecosy s-tem.
(b) number of predators found in the ecosystem.
(c) frequency of fires or other natural disasters in an ecosystem.
(d) total amount of biomass that exists in an ecosystem.

Ans: (a)

Q33. Ecotones:

(a) contain only species found in the bordering ecosy s-tems.
(b) have the same abiotic characteristics as the borde r-ing ecosystems.
(c) consist of two or more landscapes.
(d) are transitional regions between ecosystems.

Ans: (d)

Q34. Energy transfer between trophic levels in aquatic systems is generally:

(a) less efficient than terrestrial food pyramids.
(b) less efficient than a detritus food web because aquatic systems lack fungi.
(c) inverted, in which more energy is transferred from one trophic level up to the next.
(d) more efficient than terrestrial food pyramids.

Ans: (c)

Q35. For more than 20 years, scientists have been analyzing expected climate change and the impact on crops grown in particular r e-gions. For example, states that typically plant corn and soybeans may need to switch to growing cotton. Such a change is an e x-ample of :

(a) mitigation
(b) a cap-and-trade policy
(c) adaptation
(d) stabilization wedge

Ans: (c)

Q36. In a forest, deer, raccoons, squirrels, and other animals eat and find shelter. A detritus food web occurs as their wastes ac-cumulate on the forest floor. In this detritus web

(a) deer and raccoons function as the producers.
(b) fungi and earthworms function as producers.
(c) decomposers function as consumers.
(d) the deer and raccoons represent decomposers.

Ans: (a)

Q37. In an ecosystem with many similar species, we typically find:

(a) intense interspecific competition for food.
(b) competitors using different resources.
(c) intense interspecific competition for nesting sites.
(d) adaptations for battles and interspecific competition.

Ans: (b)

Q38. In an ecosystem, the replacement of one new species for another because of d i-rect competition for the same resources d e-fines:

(a) intraspecific competition.
(b) the competitive exclusion principle.
(c) character displacement.
(d) resource partitioning.

Ans: (b)

Q39. Maintaining sustainable human exploitation of ecosystem capital will be increasingly difficult because of:
(a) the over reliance on grains and other plants as a significant portion of the human diet.
(b) the expanding number of viral and bacterial human diseases.
(c) the growing human population on Earth.
(d) decreases in worldwide ocean levels.
Ans: (c)

Q40. Persistent organic pollutants (POPs) reach toxic levels in organisms in natural ecosystems in large part because of biomagnification, in which the highest concentrations of POPs are found in:
(a) primary producers
(b) secondary producers
(c) primary consumers
(d) secondary consumers
Ans: (d)

Q41. Some birds have been seen to consume certain soils in what is called geophagy. In some cases, the soils help the birds digest toxins that occur in their diets. These birds eating soil represent a member of the:
(a) biosphere consuming a component of the lithosphere.
(b) hydrosphere consuming a component of the atmosphere.
(c) lithosphere consuming a component of the biosphere.
(d) atmosphere consuming a component of the hydrosphere.
Ans: (a)

Q42. In a food chain of a grassland ecosystem the top consumers are:
(a) Herbivores
(b) Carnivores
(c) Bacteria
(d) Either Carnivores or Herbivores
Ans: (b)

Q43. Biotic Potential is counteracted by:
(a) Competition with other organism
(b) Producer is the largest
(c) Limitation of food supply
(d) None of the above.
Ans: (d)

Q44. Which of the following represents a type of mutualism?
(a) A red-tailed hawk pounces on a field mouse for dinner.
(b) A large herd of zebra graze lazily across the broad savannah
(c) A mosquito draws a blood meal from the back of an elk.
(d) A nectar-feeding bat swoops in to drink nectar from some flowers.
Ans: (d)

Q45. Which one of the following illustrates interspecific competition?
(a) The largest wolves in a pack are the first to feed on a freshly killed deer.
(b) Two honeybees from the same colony converge on a flower to collect pollen & nectar.
(c) Advertising its nectar with red colors, a columbine flower attracts a hummingbird for a meal.
(d) Standing near the dead antelope, vultures wait for the lions to finish their meal.
Ans: (d)

Q46. Why are there so few ecosystems with more than four levels of consumers?
(a) because biomass decreases by about 90% at each level moving up.
(b) because top consumers compete with and kill each other with increasing population size.
(c) because consumers at these highest levels typically form social groups that stop reproducing at high densities.
(d) because predators at the highest levels simply are not intelligent enough to hunt other top predators.
Ans: (a)

Q47. Regulating and cultural services provided by natural ecosystems:
(a) are typically the most economically valued components of ecosystems.
(b) are public goods usually provided by markets.
(c) include goods such as fresh water, wild foods, and livestock.
(d) are essential but difficult to value in monetary terms.
Ans: (d)

Q48. The phrase "ecosystem capital" is better than the phrase "natural resources" because ecosystem capital:
(a) includes the ecological value of natural ecosystems.
(b) includes the economic value of an ecosystem's goods and services.
(c) does not include the value of natural ecosystems.
(d) does not include the economic value of an ecosystem's goods and services.

Ans: (a)

Q49. A sandy and saline area is the natural habitat of an Indian animal species. The animal has no predators in that area but its existence is threatened due to the destruction of its habitat. Which one of the following could be that animal?

(a) Indian wild buffalo
(b) Indian wild ass
(c) Indian wild boar
(d) Indian gazelle

Ans: (b)

Q50. In addition to global climate change, humans are negatively impacting coral reefs by:

(a) destructive harvesting of fish for food or pets.
(b) using large amounts of coral rock to pave roads.
(c) destroying large regions of coral reefs for commercial aquaculture.
(d) introducing alien species that are thought to be more productive.

Ans: (a)

Q51. The concept of sustainable development relates to:

(a) consumption levels
(b) exhaustible resources
(c) social equity
(d) Intergenerational equity

Ans: (d)

Q52. The variability among living organisms from all sources including terrestrial, marine and other ecosystems and the ecological complexes of which they are part which includes diversity within species, between species of ecosystems refers to:

(a) geographical diversity
(b) zoological diversity
(c) ecological diversity
(d) biological diversity

Ans: (d)

Q53. 'Population dividend' refers to:

(a) total number of population
(b) youthful age structure of a population
(c) relatively high proportion of experienced aged people
(d) migration from richer region to poorer region

Ans: (b)

Q54. Inclusion strategy does not focus on:

(a) reduction of inequality
(b) reduction of poverty
(c) diversifying livelihood for tribal population
(d) getting poorer countries close

Ans: (d)

Q55. Which one of the following is the best description of the term 'ecosystem'? (IAS Prelims 2016)

(a) A community of organisms interacting with one another.
(b) That part of the Earth which is inhabited by living organisms.
(c) A community of organisms together with the environment in which they live
(d) The flora and fauna of a geographical area

Ans: (a)

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(d) The flora and fauna of a geographical area

Ans: (a)

LEVEL-2

Q1. Which of the following groups contains only easily biodegradable items?

1. Grass, flower and leather
2. Grass, wood and plastic
3. Fruits, peel cake and lime juice
4. Cake, wood and grass.

Which of the above is/are correct?

(a) 1 and 2
(b) 2 and 3
(c) 1, 3 and 4
(d) All of these

Ans: (c)

Q2. Consider the following statements :

1. The amount of usable energy remains co n-stant as it is passed from one trophic level to another.
2. The energy within an ecosystem is fixed and never changes.

Which of these statement*(s)* is/are correct ?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q3. Select the correct combination of stat e-ments (I - IV) regarding the characteristics of productivity.

1. The rate of biomass production is called productivity and is expressed in terms of a kcal m–2.
2. Gross primary productivity is rate of pr o-duction of biomass during photosynthesis.
3. Gross primary productivity minus respir a-tion loss is called net primary productivity.
4. Primary productivity depends only on the plant species inhabiting a particular area.

Which of the following statement *(s)* is/are correct?

(a) 1,2 and 3
(b) 2 and 3
(c) 2, 3 and 4
(d) 2 and 4

Ans: (b)

Q4. Food chains differ from food webs in that:

1. food chains are single sequence of who eats whom in a community.
2. food chains better represent the entire community.
3. food webs represent the complex interac-tion among food chains.
4. food chain is the flow of energy in a pop u-lation.

Which of the following statement *(s)* is/are correct?

(a) 1 and 2
(b) 1 and 3
(c) 1, 2 and 3
(d) 1, 2, 3 and 4

Ans: (a)

Q5. Which of following is/are tend *(s)* in eco-logical succession ?

1. An increase in complexity of species
2. An increase in productivity
3. An increase in community stability and species diversity
4. A decrease in nonliving organic materials.

Which of the above is/are correct?

(a) 1 and 2
(b) 1 and 4
(c) 1, 3 and 3
(d) 1, 2, 3 and 4

Ans: (c)

Q6. Which of the following include *(s)* eco-system services ?

1. Purification of air and water by forests
2. Forests mitigate droughts and flood
3. Forests act as store house of carbon
4. Forests influence hydrological cycle Which of the above is/are correct?

(a) 1 and 3
(b) 1 and 4
(c) 1, 2 and 3
(d) 1, 2, 3 and 4

Ans: (d)

Q7. Which one is not the dynamic aspect of an ecosystem?

1. Producers and mineral cycles
2. Consumers and mineral cycles
3. Producers and energy flow
4. Energy flow and mineral cycles Which of the above is/are correct?

(a) 1 and 2

(b) 2 and 4
(c) 1, 2 and 3
(d) All of these

Ans: (c)

Q8. Which of the following statements are true about ecosystem? Select the correct answer from the codes:

1. Ecosystem comprises both biotic and abiotic components.
2. Solar radiation is the main driving force of the ecosystem.
3. Ecosystem is a closed system.
4. Ecosystem does not have its own productivity Codes:

(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 3 and 4

Ans: (a)

Q9. Which of the following are the incorrect statements about 'Keystone species'.

1. Keystone species are the small-sized plants and organisms which have large effect on the environment.
2. Keystone species play critical role in maintaining the structure of an ecological community.
3. Keystone species do not generally affect other organisms.

(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) All are correct

Ans: (c)

Q10. Which of the following are correct statements about light in aquatic environments?

1. Water selectively reflects and absorbs certain wavelengths of light.
2. Photosynthetic organisms that live in deep water probably utilize red light.
3. Light intensity is an important abiotic factor in limiting the distribution of photosynthetic organisms.

(a) 1 only
(b) 2 only
(c) 1 and 3 only
(d) 2 and 3 only

Ans: (c)

Q11. The producers in ecosystems include which of the following?

1. prokaryotes 2. algae
3. plants

(a) 1 only
(b) 2 only
(c) 3 only
(d) 1, 2, and 3

Ans: (d)

Q12. Aquatic primary productivity is often limited by which of the following?

1. light 2. nutrients
3. pressure

(a) 2 only
(b) 3 only
(c) 1 and 2 only
(d) 1, 2, and 3

Ans: (c)

Q13. Consider the following statements:

1. Interactions between the two organism in which one organism kills sand feed on the second organisms, is called Parasitism.
2. Mutualism is the way two organisms of different species biologically interact in a relationship in which each individual derives a fitness benefit.

Which of the statements given above is/are true?

(a) 1 only
(b) 2 only
(c) 1 and 2 both
(d) None

Ans: (b)

Q14. Consider the following:

1. Bioaccumulation is the increases in concentration of a pollutant from the environment to the first organism in a food chain.
2. Biomagnification is then increases in concentration of pollutant from one link in a food chain to another.

Which of the statements given above is/are true?

(a) 1 only
(b) 2 only
(c) 1 and 2 both
(d) None

Ans: (c)

Q15. Consider the following statements:

1. In ecology, an ecosystem is a naturally o c-curring assemblage of organism (plant, an i-mal and other living organism - also referred to as a biotic community of biocoenosis) li v-ing together with their environment (or bi o-tope), function as a unit of sorts.
2. The term "ecosystem" first coined by Ar-thur Tansely.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) 1 and 2 both
(d) None

Ans: (c)

Q16. Which of the following statements is true?

1. Circulation of energy in the biosphere ec o-system is cyclical.
2. Circulation of matter in the biosphere ec o-system is unidirectional.

Select the correct answer using the codes gi v-en below:

(a) 1 only
(b) 2 only
(c) 1 and 2 only
(d) None

Ans: (d)

Q17. Consider the following statements :

1. Waste are of two types, biodegradable and nonbiodegradable.
2. Blue-green algae are producers.
3. Biodegradable wastes should be separated and kept in blue colour bins for garbage co l-lectors.

Which of these statement(s) is/are correct ?

(a) 1 and 2
(b) 2 and 3
(c) 1, 2 and 3
(d) None

Ans: (a)

Q18. Not all parasitism involves feeding on the body of the host. The exception is:

1. Ectoparasitism 2. Endopasitism
3. Parasitoids 4. Brood Parasitism Choose the option from the codes given below:

(a) 1 only
(b) 2 only
(c) 3 only
(d) 4 only

Ans: (d)

Q19. What factor does not contribute to the rapid loss of nutrients from terrestrial ec o-systems?

1. Clear cutting native forests
2. Early seral stages
3. Climax communities
4. Low diversity Choose the correct option from the codes given below:

(a) 1 and 2
(b) 2 and 3
(c) 3 only
(d) 3 and 4

Ans: (c)

Q20. When two organisms attempt to utilize the same resource, the result is:

1. A fundamental niche
2. Competition
3. Commensalism
4. Mutualism Choose the correct option from the codes given below:

(a) 1 and 2
(b) 2 only
(c) 3 and 4
(d) 1, 2, 3 and 4

Ans: (b)

Q21. With reference to food chains in ec o-systems, consider the following statements:

1. A food chain illustrates the order in which a chain of organisms feed upon each other.
2. Food chains are found within the popul a-tions of a species.
3. A food chain illustrates the numbers of each organism which are eaten by others.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 1, 2 and 3
(d) None

Ans: (a)

Q22. With reference to the food chains in ecosystems, which of the following kinds of organism is/are known as decomposer o r-ganism/organisms?

1. Virus 2. Fungi
3. Bacteria Select the correct answer using the codes given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q23. Consider the following :
1. Bats 2. Bears
3. Rodents The phenomenon of hibernation can be observed in which of the above kinds of animals?
(a) 1 and 2 only
(b) 2 only
(c) 1, 2 and 3
(d) Hibernation cannot be observed in any of the above

Ans: (c)

Q24. Which of the following adds/add carbon dioxide to the carbon cycle on the planet Earth?
1. Volcanic action
2. Respiration
3. Photosynthesis
4. Decay of organic matter Select the correct answer using the code given below.
(a) 1 and 3 only
(b) 2 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (c)

Q25. With reference to two non - conventional energy sources called „coalbed methane' and 'shale gas', consider the following statements :
1. Coalbed methane is the pure methane gas extracted from coal seams, while shale gas is a mixture of propane and butane only that can be extracted from fine -grained sedimentary rocks.
2. In Ind ia, abundant coalbed methane sources exist, but so far no shale gas sources have been found.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q26. The study of relationship of living organism with each other and with their environment is called ____.
1. Economy
2. Ecology
3. Geography
4. Environment Which among the following defines the statement
(a) 1 only
(b) 2 only
(c) 3 only
(d) 4 only

Ans: (b)

Q27. Consider the following statement related to Abiotic
1. Abiotic components of ecosystem are the living features of ecosystem on which the living organism depends.
2. Abiotic component is referred to the physical environment and its numerous interacting variables.
Which among the following statement is correct
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) None of the Above

Ans: (b)

Q28. What is the name of processes of N itrogen cycle?
1. Nitrogen Fixation
2. Nitrification
3. Assimilation
4. Denitrification Choose the correct option
(a) 1 and 2
(b) 3 and 4
(c) 1, 2, 3
(d) 1, 2, 3, 4

Ans: (d)

Q29. Which equation explains Nitrification?
1. $NH3 \rightarrow NO2 \rightarrow NO3-$
2. $NH3 \rightarrow NO3 \rightarrow NO2-$
3. $NH3 \rightarrow NO4 \rightarrow NO2-$ Select the correct answer from the following codes
(a) 1 only
(b) 2 only
(c) 3 only

(d) All of the Above

Ans: (a)

Q30. Atmosphere contains 21% of which gas?

1. Nitrogen
2. Oxygen
3. Phosphorous

(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (b)

Q31. What is the purpose of Ozone layer?

1. Protects UV rays to reach on earth
2. Helps UV rays to reach earth
3. The source of ozone is the oxygen in the atmosphere Choose the correct code

(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 1, 2, 3

Ans: (c)

Q32. Consider the following statements:

1. Burning fossil fuel decreases oxygen in atmosphere
2. Burning fossil fuel increases carbon dio x-ide
3. The main source of oxygen is atmosphere Which among the following code is inco r-rect?

(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (d)

Q33. How is the oxygen cycle effected?

1. Human activities
2. Running of automobiles
3. Consumption of fossil fuels Choose the correct code

(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 1, 2, 3

Ans: (d)

Q34. With reference to the process of phot o-synthesis for carbon dioxide, which of the following statement is correct?

1. Through the process of photosynthesis ca r-bon enters into non-living world in the form of carbon dioxide.
2. Recycling of carbon is done by the burning of fossil fuels.

Select the correct answer from the following codes

(a) 1 Only
(b) 2 only
(c) 1 and 2
(d) Neither of the Above

Ans: (b)

Q35. Which of the following is not involved in the continuous water exchange?

1. Stones 2. Air
3. Land 4. Sea Choose the correct code

(a) 1 only
(b) 2 only
(c) 1 and 2
(d) 3 and 4

Ans: (a)

Q36. Consider the following statement

1. Evaporation takes water into atmosphere in the form of vapours.
2. Clouds are formed when the vaporized w a-ter is cooled and condensed.

Which of the following statement is correct?

(a) 1 only
(b) 2 only
(c) 1 and 2
(d) None of the Above

Ans: (c)

Q37. Name the elements that help in crea t-ing phosphorous cycle?

1. Rocks 2. Earth crust
3. Air 4. Water Choose the correct code

(a) 1 and 2
(b) 3 and 4
(c) 1 and 3
(d) 1 and 4

Ans: (a)

Q38. Why phosphorous is not found in a t-mosphere?

1. It doesn't combine well with other el e-ments

2. It just cannot be found
3. The sun evaporates it
4. At normal temperatures and pressure, phosphorous is at a liquid state Choose the correct code from the following statement regarding phosphorous
(a) 1 only
(b) 2 only
(c) 3 only
(d) 4 only

Ans: (d)

Q39. How does phosphorous enter plants in the soil?
1. Photosynthesis 2. Water in the soil
3. Rocks on the sand Choose the correct answer
(a) 1 only
(b) 2 only
(c) 3 only
(d) 1, 2, 3

Ans: (b)

Q40. What is the impact of human on phosphorous cycle?
1. Killing plants
2. No impact
3. Pollution
4. Use fertilizers that are not natural Choose the correct code
(a) 1 only
(b) 2 only
(c) 3 only
(d) 4 only

Ans: (d)

Q41. Megatherms is defines as
1. Organisms living in tropical regions
2. Organisms living in subtropical regions
3. Organisms living in temperate regions
Choose the correct definition of Megatherms
(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (a)

Q42. Consider the following related to humidity
1. Humidity is the water vapor present in the atmosphere.
2. Humidity is measured by barometer
3. Humidity is defined as molecules of water/unit volume Choose the correct code
(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 1, 2, 3

Ans: (c)

Q43. ____ are the living organism that shapes the ecosystem and comes regularly in contact with each other.
(a) Abiotic components
(b) Biotic components
(c) Antibiotic components
(d) None of the Above

Ans: (b)

Q44. Consider the following statement in regards to ecosystem
1. Components of an ecosystem include Biotic
2. Components of an ecosystem include Abiotic Which of the following statement is correct?
(a) 1 only
(b) 2 only
(c) 1 and 2
(d) None of the Above

Ans: (c)

Q45. The process of cycling of minerals and components through the ecosystem is called_____
1. Biological cycle
2. Biogeochemical cycle
3. Biochemical cycle Choose the correct code
(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (b)

Q46. Name the forest that is found in Asia, Europe.
1. Boreal Forest
2. Temperate Deciduous Forests
3. Tropical or Rainforests Choose the correct name
(a) 1 only
(b) 2 only
(c) 3 only
(d) All of the Above

Ans: (a)

Q47. Consider the following statement

1. The soil of Temperate Deciduous forests is richer than boreal forests.
2. Temperate Deciduous forests are mostly found in the equatorial belt of the plant.

Which statement is incorrect?

(a) 1 only
(b) 2 only
(c) 1 and 2
(d) None of the Above

Ans: (a)

Q48. Which forest does not see winter season?

1. Boreal Forest
2. Temperate Deciduous Forests
3. Tropical Forest Choose the correct code

(a) 1 only
(b) 1 and 2
(c) 1, 2, 3
(d) 3 only

Ans: (d)

Q49. How much desert area exists on the planet?

(a) One third
(b) Half
(c) One fifth
(d) One fourth

Ans: (c)

Q50. Marine lives are found in which place?

1. Ocean
2. Lake
3. Ponds
4. Sand Choose the correct code

(a) 1, 2
(b) 3, 4
(c) 1, 2, 3
(d) 1, 2, 3, 4

Ans: (c)

Q51. Consider the following statement

1. Most of the oxygen in the atmosphere is generated by the algae.
2. Evaporation of salt and water turns into rain
3. Large amount of carbon dioxide is absorbed by the algae in the atmosphere.

Which statement is incorrect?

(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (d)

Q52. The water that has less content of salt is called _____.

1. Sea
2. Fresh water
3. Oil Choose the correct code

(a) 1 only
(b) 2 only
(c) 3 only
(d) All of the Above

Ans: (b)

Q53. Consider the following statement

1. Atmospheric temperature of the place depends upon the slope, altitude, latitude, topography.
2. Temperature increases as we go from equator to poles.
3. Temperature lowers as we go from equator to poles Choose the incorrect statement

(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (b)

Q54. Consider the following statements

1. Three-fourth of the earth surface is covered by water but less than 3% is fresh water used for human consumption.
2. Of the total fresh water available, Ice-cap has highest share of 2% followed by ground water 0.68%.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 only
(c) 1 and 2
(d) Neither of the Above

Ans: (c)

Q55. With reference to phosphorus cycling, consider the following statements

1. The natural reservoir of phosphorus is atmosphere, which contains phosphorus in the form of phosphates.
2. Herbivores and other animals obtain phosphorus from plants.

3. Unlike carbon cycle, there is no respiratory release of phosphorus into atmosphere.
Which of the statements given above is/are correct?
(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 1, 2, 3

Ans: (b)

Q56. What is the name of the cycle where the continuous and balanced process of evaporation, precipitation, transpiration and runoff of water takes place.
1. Hydrological
2. Tropological
3. Hyper logical Choose the correct option
(a) 1 only
(b) 2 only
(c) 3 only
(d) None of the Above

Ans: (a)

Q57. With reference to ecosystem stability, consider the following statements
1. A diverse and complex ecosystem is more stable.
2. Ecosystem stability increases with decrease in number of links in food web.
Which of the statements given above is/are correct
(a) 1 only
(b) 2 only
(c) and 2
(d) None of the Above

Ans: (a)

Q58. Water in a wetland can be
1. Fresh
2. Brackish
3. Static Select the correct answer using the codes given below.
(a) 1 and 2
(b) 1 and 3
(c) 2 and 3
(d) 1, 2 and 3

Ans: (d)

Q59. Consider the following statement r e-lated to humidity
1. Specific humidity
2. Absolute humidity
3. Relative humidity
4. Non relative humidity Which among the following is not the type of humidity?
(a) 1 only
(b) 2 only
(c) 3 only
(d) 4 only

Ans: (d)

Q60. Consider the following statement
1. Steppe is found in low latitudes and middle latitudes.
2. Prairies are humid and densely covered tall grasslands
3. Savanna are the areas of thick high grasses
Choose the correct code
(a) 1 only
(b) 2 only
(c) 3 only
(d) 1, 2, 3

Ans: (d)

Q61. On which of the following can you find the Bureau of Energy Efficiency Star L a-bel? (IAS Prelims 2016)
1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps Select the co r-rect answer using the code given below.
(a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (d)

Biological Diversity

LEVEL-1

Q1. A keystone species

(a) has a disproportionately large impact on an ecosy s-tem.
(b) typically reduces overall diversity of an ecosystem.
(c) is typically an herbivore.
(d) is an example of amensalism.

Ans: (a)

Q2. Extinction of a weaker species by an aggressive alien species is the results of

(a) Endemism of weaker species
(b) Habitat loss
(c) The Domino Effect
(d) All of the above.

Ans: (a)

Q3. In the Lower Himalayan Mountains, several species of salamander, an amphib i-an, live in or near a stream. The largest spe-cies lives in the stream and along its edges, a smaller species lives on land within a meter or two of the stream, and a smaller species lives about 3 -5 meters away from the stream. In this region, these three salama n-der species are using

(a) different niches within the same habitat
(b) the same niche and microhabitat
(c) the same landscape but different ecosystems
(d) the same habitat but different niches

Ans: (a)

Q4. Invasive species are dangerous because

(a) they are almost all predators, disturbing ecological relationships by eating other species.
(b) they carry viruses that spread disease in new ecosys-tems.
(c) the native species have not evolved wit h these o r-ganisms.
(d) they tend to be secretive, going unnoticed in their new ecosystems.

Ans: (c)

Q5. Protection and preservation of enda n-gered species away from their natural hab i-tat under human care in zoos, nurseries and laboratories is known as

(a) In-situ conservation
(b) Ex-situ conservation
(c) Biodiversity conservation
(d) None of the above

Ans: (d)

Q6. Protection of biodiversity around the world requires:

(a) basic science to produce government policies and laws that then must be enforced.
(b) changes to social structure and political organiz a-tions that drive basic science.
(c) new technologies and techniques that are still being developed.
(d) the introduction of new species into new regions to spread a species range.

Ans: (a)

Q7. Withi n biological communities, some species are important in determining the ability of a large number of other species to persist in the community. Such species are called

(a) Keystone species
(b) Allopatric species
(c) Sympatric species
(d) Threatened species

Ans: (a)

Q8. The diversity and productivity or coral reefs is most similar to that of

(a) desert environments
(b) a natural prairie.
(c) tropic rain forests
(d) a river system.

Ans: (c)

Q9. The risk of introducing a natural enemy to control an invasive species is that

(a) it might drive the invasive species to extinction.
(b) the natural enemy might also become a pest.
(c) the natural enemy might evolve into a new species
(d) the natural enemy may introduce genetic diversity into the invasive species.

Ans: (b)

Q10. Biodiversity is important because:

(a) it is necessary to maintain ecosystems.
(b) humans can use new sources of food.
(c) without certain species, photosynthesis may not be possible.
(d) certain species are necessary to provide oxygen in the atmosphere.

Ans: (a)

Q11. Compared to forests using sustainable forest management, commercial forests

managed for maximum sustainable yield of commercially valuable species will

(a) support more biological diversity.
(b) be more resistant to pests.
(c) produce a greater variety of wood.
(d) have greater erosion problems.

Ans: (d)

Q12. Endemic species are:

(a) secure groups that show the least risk of extinction.
(b) limited to just one habitat.
(c) widely distributed, found especially on large cont i-nents.
(d) usually the dominant species within an ecosystem.

Ans: (b)

Q13. The greatest loss of biodiversity in the last two centuries has resulted from:

(a) the introduction of alien species to new ecosystems.
(b) the use of fossil fuels to power transportation and electrical production.
(c) the physical alteration of habitats.
(d) the use of rivers, lakes, and oceans for transport a-tion.

Ans: (c)

Q14. Which of the following represents the greatest conservation of the genetic bank?

(a) the human genome center, analyzing the comp o-nents of the human genome.
(b) seed banks that store seeds of thousands of plants from around the world.
(c) the field of proteomics, investigating the many ways the proteins function in organisms.
(d) all of the varieties of corn wheat, and rice currently serving as crops.

Ans: (b)

Q15. Which one of the following groups of animals belongs to the category of enda n-gered species ?

(a) Great Indian Bustard, Musk Deer, Red Panda and Asiatic Wild Ass
(b) Kashmir Stag, Cheetal, Blue Bull and Great Indian Bustard
(c) Snow Leopard, Swamp Deer, Rhesus Monkey and Saras (Crane)
(d) Lion-tailed Macaque, Blue Bull, Hanuman Langur and Cheetal

Ans: (a)

Q16. Which one of the following national parks is located near Chamoli?

(a) Dudhwa National Park
(b) Great Himalayan Park
(c) Jim Corbett National Park
(d) Nanda Devi National Park

Ans: (d)

Q17. Which one of the following is included in the world list of biosphere reserves by UNESCO?

(a) Kinnaur region
(b) Spiti Valley
(c) Nallamalai Hills
(d) Sunderbans

Ans: (d)

Q18. Which one of the following is a global biodiversity hotspot in India?

(a) Western Ghats
(b) Western Himalayas
(c) Eastern Ghats
(d) Northern Himalayas

Ans: (a)

Q19. In which one of the following states is Ranganathittu Bird Sanctuary located?

(a) Tamil Nadu
(b) Kerala
(c) Karnataka
(d) Andhra Pradesh

Ans: (c)

Q20. For which one of the following is S u-alkuchi famous?

(a) Bird sanctuary
(b) Temple city
(c) Silk centre
(d) Hill station

Ans: (c)

Q21. Which one of the following is the co r-rect sequence of the given tiger reserves of India from North to South?

(a) Dudwa-Kanha-Indravati-Bandipur
(b) Kanha-Bandipur-Dudwa-Indravati
(c) Indravati-Kanha-Dudwa-Bandipur
(d) Dudwa-Kanha-Bandipur-Indravati

Ans: (a)

Q22. Kanha National Park belongs to which one among the following biogeographical areas in the world?

(a) Tropical Sub-humid Forests
(b) Tropical Humid Forests
(c) Tropical Dry Forests
(d) Tropical Moist Forests

Ans: (c)

Q23. In wildlife conservation which one among the following best defines an „endemic species'?

(a) When the critical number of a species declines in a forest due to parasitic attack
(b) A species which is cosmopolitan and can be commonly found in biosphere
(c) An endangered species which is found in a few restricted areas on the Earth
(d) A species confined to a particular region and not found anywhere else

Ans: (d)

Q24. Veliconda hills, which is a part of Eastern Ghats, is situated in

(a) Odisha
(b) Tamil Nadu
(c) Karnataka (d Andhra Pradesh

Ans: (d)

Q25. Biodiversity is richer in

(a) tropical regions
(b) polar regions
(c) temperate regions
(d) oceans

Ans: (a)

Q26. The biodiversity is the study of diversity

(a) Below species level
(b) At species level
(c) At community level
(d) At all levels of biological organization

Ans: (d)

Q27. The term 'Biodiversity' was popularized by

(a) Edward Wilson
(b) Alexander Von Humboldt
(c) Paul Ehrlich
(d) Robert May

Ans: (a)

Q28. According to IUCN 2004, the total number of plant and animal species described so far is slightly more than

(a) 5 million
(b) 7 million
(c) 1.5 million
(d) 0.5 million

Ans: (c)

Q29. More than 70% of all the species recorded so far, are

(a) Insects
(b) Plants
(c) Animals
(d) Invertebrates

Ans: (c)

Q30. Mark the correct statement

(a) Amazonian rain forest has greatest biodiversity on earth
(b) According to Robert May estimates, the global species diversity is 7 million
(c) Biodiversity is the greatest in tropics
(d) All of these

Ans: (d)

Q31. Amongst vertebrates, the species diversity is the maximum in

(a) Birds
(b) Fishes
(c) Reptiles
(d) Mammals

Ans: (b)

Q32. Following arrangement is correct from the point of view of decreasing biodiversity in angiosperms *(N)*, fungi *(F)*, pteridophytes *(P)* and algae*(A)*

(a) N > F > P > A
(b) N > F > A > P
(c) F > N > P > A
(d) F > N > A > P

Ans: (d)

Q33. India's share in global species diversity is around

(a) 8%
(b) 14 %
(c) 17 %
(d) 2.4 %

Ans: (a)

Q34. The number of plant species recorded from India, is

(a) 30,000
(b) 45,000
(c) 70,000
(d) 90,000

Ans: (b)

Q35. If S is species richness, A is area, Z is slope of the line, and the C is Y -intercept, then the species richness will be shown as

(a) S = C + Az
(b) S = C + AZ
(c) S = C. AZ
(d) S = C. Az

Ans: (d)

Q36. The „Increased diversity contributes to higher productivity' was the idea of
(a) Robert May
(b) David Tilman
(c) Edward Wilson
(d) A V Humboldt

Ans: (b)

Q37. Which of the following is not the example of recent extinction
(a) Steller's sea cow
(b) Dodo
(c) Quagga
(d) Mastodont

Ans: (d)

Q38. Which vertebrate group is more vulnerable to extinction
(a) Birds
(b) Amphibians
(c) Mammals
(d) Fishes

Ans: (b)

Q39. From Origin of life to its diversification on earth, there have occurred following number of episodes of mass extinction
(a) Two
(b) Three
(c) Four
(d) Five

Ans: (d)

Q40. The Evil Quartet of biodiversity loss, does not include
(a) Habitat loss
(b) Introduction of alien species
(c) Overexploitation
(d) Hunting

Ans: (d)

Q41. Amazon rain forest, called the „Lungs of the planet', contribute following percentage of oxygen by photosynthesis, to earth atmosphere
(a) 20%
(b) 35%
(c) 42%
(d) 50%

Ans: (a)

Q42. The following is not the approach for in situ conservation
(a) Biosphere reserve
(b) Sanctuary
(c) Wild life safari park
(d) Sacred grove

Ans: (c)

Q43. The 'Earth summit' for biodiversity was held in
(a) China
(b) Brazil
(c) Germany
(d) S. Africa

Ans: (b)

Q44. The Indian Rhinoceros is a natural inhabitant of which one of the Indian states?
(a) Uttarakhand
(b) Uttar Pradesh
(c) Himachal Pradesh
(d) Assam

Ans: (d)

Q45. Which of the following is a native of Rajasthan and Gujarat and is presently an endangered animal
(a) Wild Ass
(b) Rhinoceros
(c) Great Indian Bustard
(d) Black buck (Antelope)

Ans: (c)

Q46. Bandhavgarh national park is situated in
(a) Karnataka
(b) Orissa
(c) Madhya Pradesh
(d) Gujrat

Ans: (c)

Q47. Two places in India show maximum biological diversity.
One of them is the Western Ghats, another is
(a) Eastern Ghats
(b) North – East India
(c) Coastal region
(d) Foot hill of Himalaya

Ans: (b)

Q48. First National Park of India was established in 1935 and was named as

(a) Kanha National Park
(b) Hailey's National Park
(c) Rajaji National Park
(d) None of these

Ans: (b)

Q49. Which of the following set of National Park and the State is wrongly matched?
(a) Dudhwa – U.P.
(b) Bandipur - Karnataka
(c) Nokrek - Meghalaya
(d) Simlipal – Bihar

Ans: (d)

Q50. Match the column -I with column -II
Column I Column II
(i) Bihar (a) Indian elephant
(ii) Rajasthan (b) Gazello
(iii) Madhya Pradesh (c) Leopard
(iv) Uttar Pradesh (d) Barasingha
(v) Gujarat (e) Sloth Bear
(f) Asiatic Lion
(a) (i) a (ii) c (iii) e (iv) b (v) d
(b) (i) e (ii) b (iii) d (iv) c (v) f
(c) (i) c (ii) e (iii) b (iv) d (v) a
(d) (i) f (ii) e (iii) d (iv) c (v) b

Ans: (b)

Q51. Main reason behind the destruction of Bio-diversity is :
(a) Hunting
(b) Soil erosion
(c) Green house effect
(d) Destruction of natural habitat

Ans: (d)

Q52. Project tiger was launched by the re c-ommendation of Indian board of Wildlife (IBWL) in
(a) 1971
(b) 1975
(c) 1973
(d) 1972

Ans: (c)

Q53. Royal Bengal Tiger has been co n-served in
(a) Kanha National Park
(b) Manas National Park
(c) Sundarbans
(d) Corbett National Park

Ans: (c)

Q54. First Biosphere Reserve in India was
(a) Nanda Devi
(b) Created at foot hills of Himalaya
(c) Established in 1986
(d) All of these

Ans: (c)

Q55. Which of the following natural bounty is used for giving protection to fauna only?
(a) Botanical garden
(b) National Park
(c) Biosphere Reserve
(d) Sanctuary

Ans: (d)

Q56. The four Biosphere Reserves, i.e. Na n-da Devi (N), Gulf of Mannar (G), Sundarbans (S) and Manas (M) belong to four different states. Mark the incorrect statement in the following
(a) S.M. & G. do not belong to U.P.
(b) G and N do not belong to Assam
(c) None of these belong to Tamil Nadu.
(d) M.S.G. belong to Eastern states

Ans: (c)

Q57. Out of 25 hot spots in the world, how many appear in the tropical forest
(a) 25
(b) 15
(c) 9
(d) 5

Ans: (b)

Q58. Which resource is non-renewable
(a) Wild life
(b) Aquatic animals
(c) Biological species
(d) Fresh water plants

Ans: (c)

Q59. Anthropogenic extinction means
(a) The extinction of apes
(b) Extinction due to introduction of exotic species
(c) Catastrophic extinction
(d) Extinction due to human activities

Ans: ()

Q60. How many of the following can not be included in wild life – Human, Cultivated plants, Microorganisms, Fossils and Domes-ticated animals
(a) Two
(b) Three
(c) Four

(d) Five

Ans: (c)

Q61. An example of biological conservation in situ is

(a) Biosphere reserve
(b) Zoo
(c) Botanical garden
(d) All of these

Ans: (a)

Q62. The breeding place of Flamingo (Ha n-sawar) in India is

(a) Chilka lake
(b) Bharatpur Bird's sanctuary
(c) Sambar lake
(d) Runn of Kutch

Ans: (a)

Q63. Which group of the vertebrates co m-prises the highest number of endangered species?

(a) Birds
(b) Mammals
(c) Fishes
(d) Reptiles

Ans: (b)

Q64. Diversity between two communities is called

(a) Alpha diversity
(b) Beta diversity
(c) Gamma diversity
(d) None of above

Ans: (b)

Q65. The number of critically endangered animal and plant species in India is respe c-tively :

(a) 5 & 10
(b) 18 & 44
(c) 31 & 14
(d) 54 & 113

Ans: (b)

Q66. Following organization is associated with the Red – Data book

(a) National wild life action plan
(b) International union for conservation of nature and natural resources
(c) Bombay natural history
(d) Man and Biosphere

Ans: (b)

Q67. Which of the following species is crit i-cally endangered in India?

(a) Red Panda
(b) Pigmy hog
(c) Black buck
(d) Reindeer

Ans: (b)

Q68. The following is not the major threat category of wild life

(a) Critically endangered
(b) Vulnerable
(c) Endangered
(d) Extinct in the wild

Ans: (d)

Q69. Following number of terrestrial Hot Spots for conservation of biodiversity have been identified worldwide

(a) 9
(b) 15
(c) 25
(d) 40

Ans: (c)

Q70. The biological species are

(a) Inexhaustible natural resources
(b) Renewable resources
(c) Non – renewable resources
(d) Not natural resources

Ans: (c)

Q71. In cryopreservation germplasm is maintained at:

(a) – 196° F
(b) 0° F
(c) – 100° F
(d) None

Ans: (d)

Q72. The maximum number of species have extincted from

(a) Islands
(b) Mainland
(c) Oceans
(d) Fresh water bodies

Ans: (a)

Q73. The 'Earth Summit' held at Rio de Janeiro in 1992 resulted into

(a) Compilation of Red list
(b) Establishment of Biosphere Reserves
(c) Convention on Biodiversity
(d) Development of Hot Spots of Biodiversity

Ans: (c)

Q74. Buffer zone, Core zone and the Transition zone are three subdivisions of the Biosphere reserves. The transition zone

(a) Covers the Buffer zone and lies in between Buffer zone and the Core zone
(b) Covers the Core zone and lies in between the Core zone and the Buffer zone
(c) Is the innermost zone of the Biosphere reserve
(d) Is the outermost zone of the Biosphere reserve

Ans: (d)

Q75. Which one of the following National Parks has a climate that varies from tropical to subtropical, temperate and arctic? [IAS Prelims 2015]

(a) Khangchendzonga National Park
(b) Nandadevi National Park
(c) Neora Valley National Park
(d) Namdapha National Park

Ans: (d)

Q76. In India, in which one of the following types of forests is teak a dominant tree species? [IAS Prelims 2015]

(a) Tropical moist deciduous forest
(b) Tropical rain forest
(c) Tropical thorn scrub forest
(d) Temperate forest with grasslands

Ans: (a)

Q79. Which of the following National Parks is unique in being a swamp with floating vegetation that supports a rich biodiversity? [IAS Prelims 2015]

(a) Bhitarkanika National Park
(b) Keibul Lamjao National Park
(c) Keoladeo Ghana National Park
(d) Sultanpur National Park

Ans: (b)

Q78. Which one of the following is the national aquatic animal of India? [IAS Prelims 2015]

(a) Saltwater crocodile
(b) Olive ridley turtle
(c) Gangetic dolphin
(d) Gharial

Ans: (c)

Q79. What is/are unique about „Kharai camel', a breed found in India? [IAS Prelims 2016]

1. It is capable of swimming up to three kilometers in seawater.
2. It survives by grazing on mangroves.
3. It lives in the wild and cannot be domesticated.

Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q80. Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange -coloured fruit pulp. In which part of India has it been discovered?

(a) Andaman Islands [IAS Prelims 2016]
(b) Anaimalai Forests
(c) Maikala Hills
(d) Tropical rain forests of northeast

Ans: (a)

LEVEL-2

Q1. Consider the following pairs Protected area Well-known for

1. Bhiterkanika, Odisha — Salt Water Crocodile
2. Desert National Park, — Great Indian Bustard Rajasthan
3. Eravikulam, Kerala — Hoolak Gibbon

Which of the pairs given above is / are co r-rectly matched ?

(a) 1 only
(b) 1 and 2
(c) 2 only
(d) 1, 2 and 3

Ans: (b)

Q2. Three of the following criteria have contributed to the recognition of Western Ghats , Sri Lanka and Indo Burma regions as hotspots of biodiversity

1. Species richness
2. Vegetation density
3. Endemism
4. Ethno-botanical importance
5. Threat perception
6. Adaption of flora and fauna to warm and humid conditions Which three of the above are correct criteria in this context?

(a) 1, 2 and 6
(b) 2, 4 and 6
(c) 1, 3 and 5
(d) 3, 4 and 6

Ans: (c)

Q3. Consider the following statements

1. Biodiversity hotspots are located only in tropical regions.
2. India has four biodiversity hotspots i.e., Eastern Himalayas, Western Himalayas, Western Ghats and Andaman and Nicobar Islands.

Which of the statements given above is / are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q4. The "Red Data Books" published by the International Union for Conservation of Nature and Natural resources

(IUCN) contain lists of ?

1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes gi v-en below:

(a) 1 and 3
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q5. How does National Biodiversity Authority (NBA) help in protecting the Indian a g-riculture?

1. NBA checks the biopiracy and protects the indigenous and traditional genetic resources.
2. National Biodiversity Authority (NBA) d i-rectly monitors and supervises the scientific research on genetic modification of crop plants.
3. Application for Intellectual Property Rights related to genetic/biological resources can not be made without the approval of NBA.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q6. Consider the following protected areas:

1. Bandipur 2. Bhitarkanika
3. Manas 4. Sunderbans Which of the above are declared Tiger Reserves?

(a) 1 and 2 only
(b) 1, 3 and 4 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (b)

Q7. Which of the following can be threats to the biodiversity of a geographical area?

1. Global warming
2. Fragmentation of habitat

3. Invasion of alien species
4. Promotion of vegetarianism Select the correct answer using the codes given below:
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1, 2 and 3 only
(d) 1, 2, 3 and 4 only

Ans: (a)

Q8. Biodiversity forms the basis for human existence in the following ways:
1. Soil formation
2. Prevention of soil erosion
3. Recycling of waste
4. Pollination of crops Select the correct answer using the codes given below:
(a) 1, 2 and 3 only
(b) 2, 3 and 4 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4

Ans: (d)

Q9. Which of the following regions of India have been designated as biodiversity hotspots?
Select the correct answer from the codes given below:
1. Eastern Himalaya 2. Eastern Ghat
3. Western Ghat 4. Western Himalaya Codes:
(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 4 only
(d) 3 and 4 only

Ans: (b)

Q10. The steps taken by the Government of India for conversion endangered species are
1. The Central Government has enacted the Wild Life
(Protection) Act, 1972 for protection of wild life including birds.
2. Wetland (Conservation and Management) Rules 2010 have been framed for protection of wetlands, in the States, which are habitats of birds.
3. Wildlife Crime Control Bureau has been established for control of illegal trade in wildlife, including endangered species of birds and their parts and products.
4. The Centrally Sponsored Scheme of National Plan for Conservation of Aquatic Eco - System also provides assistance to the States for management of wetlands including Ramsar sites in the country.
Select the answer from the codes given below-
(a) 1, 2, and 3
(b) 2, 3, and 4
(c) 1, 3, and 4
(d) All of the above

Ans: (d)

Q11. Consider the following statements
1. Tree Foundation, an NGO engaged in conservation of the sea turtle found more than 100 dead Olive Ridley Turtles in the shores of Nagapattinam.
2. The Olive Ridley turtles find the coastline of Nagapattinam as a favourable nesting habitat and that's why they reach to the shore from December to March every year.
3. The Olive Ridley looks very similar to the Kemp's Riddle, but has a deeper body and slightly up -turned edges to its carapace (shell).
4. Olive Ridley weighs around 45 kilograms and are 70cm in size and this makes them the smallest of the sea turtles along with Kemp riddles.
Which of the following statements are correct?
(a) 1, 2 and 3
(b) 2, 3 and
(c) 1, 3 and 4
(d) All of the above

Ans: (d)

Q12. Which of the following statement is/are correct?
1. First Climate Change theatre in India (second theatre in the world) was opened at Pusa, New Delhi in January 2014.
2. The Inter-governmental Panel on Climate Change
(IPCC) UN report on 17 January 2014 reported that during 2000 to 2010, the CO2 has grown by 2.2 percent per year and this rise is almost twice higher from the growth of the period of 1970 to 2000.
Answer from the codes given below:
(a) 1 only
(b) 2 only

(c) 1 and 2 only
(d) None of these

Ans: (b)

Q13. Which of the following two criteria have to be met in order to qualify as a ‚biodiversity hotspot' on the world hotspots map?

1. The region must contain at last 0.5% or 1500 species of vascular plants as endemic species.
2. The region has to have lost at least 70% of its primary vegetation.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) 1 and 2 both
(d) None

Ans: (c)

Q14. Sumatran rhino populations have declined steadily to a point near extinction. Because of its population decline, this unusual forest dwelling rhino is near its :

1. carrying capacity
2. officially listed as threatened
3. critical number
4. officially listed as endangered Which of the above is/are correct?

(a) 1 and 2
(b) 3 and 4
(c) 1 and 3
(d) 2 and 3

Ans: (b)

Q15. Which of the following can be threats to the biodiversity of a geographical area?

1. Global warming
2. Fragmentation of habitat
3. Invasion of alien species
4. Promotion of vegetarianism Select the correct answer using the codes given below:

(a) 1, 2 and 3
(b) 2 and 3
(c) 1 and 4
(d) 1, 2, 3 and 4

Ans: (a)

Q16. The "Red Data Books" published by the International Union for Conservation of Nature and Natural resources (IUCN) contain lists of ?

1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes given below:

(a) 1 and 3
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q17. Consider the following statements:

1. The boundaries of a National Park are defined by legislation.
2. A Biosphere Reserve is declared to conserve a few specific species of flora and fauna.
3. In a Wildlife Sanctuary, limited biotic interference is permitted.

Which of the statements given above is / correct ?

(a) 1 only
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

Ans: (c)

Q18. One Carbon Credit is defined as ____ .

1. Credit permit to release one ton of carbon dioxide.
2. providing loans to establish a unit which produces carbon dioxide for industrial use.
3. Finding out one new business which can use and recycle greenhouse gases.

Which of the following statements (s) is/are correct?

(a) 3 only
(b) 2 only
(c) 1 only
(d) 1, 2 and 3

Ans: (c)

Q19. How does National Biodiversity Authority (NBA) help in protecting the Indian agriculture?

1. NBA checks the biopiracy and protects the indigenous and traditional genetic resources.

2. NBA directly monitors and supervises the scientific research on genetic modification of crop plants.
3. Application for Intellectual Property Rights related to genetic/biological resources cannot be made without the approval of NBA.
Which of the statements given above is /are correct?
(a) 1only
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

Ans: (d)

Q20. Three of the following criteria have contributed to the recognition of Western Ghats , Sri Lanka and Indo Burma regions as hotspots of biodiversity
1. Species richness
2. Vegetation density
3. Endemism
4. Ethno-botanical importance
5. Threat perception
6. Adaption of flora and fauna to warm and humid conditions Which three of the above are correct criteria in this context?
(a) 1, 2 and 6
(b) 2, 4 and 6
(c) 1, 3 and 5
(d) 3, 4 and 6

Ans: (c)

Q21. Biodiversity forms the basis for human existence in the following ways
1. Soil formation
2. Prevention of soil erosion
3. Recycling of waste
4. Pollination of crops Select the correct answer using the codes given below:
(a) 1,2 and 3
(b) 2, 3 and 4
(c) 1 and 4
(d) 1, 2, 3 and 4

Ans: (d)

Q22. Which of the following can be threats to the biodiversity of a geographical area?
1. Global warming
2. Fragmentation of habitat
3. Invasion of alien species
4. Promotion of vegetarianism Select the correct answer using the codes given below :
(a) 1, 2 and 3
(b) 2 and 3
(c) 1 and 4
(d) 1, 2, 3 and 4

Ans: (a)

Q23. Consider the following statements :
1. The boundaries of a National Park are defined by legislation.
2. A Biosphere Reserve is declared to conserve a few specific species of flora and fauna.
3. In a Wildlife Sanctuary, limited biotic interference is permitted.
Which of the statements given above is / correct ?
(a) 1 only
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

Ans: (c)

Q24. In which of the following States is lion-tailed macaque found in its natural habitat?
1. Tamil Nadu 2. Kerala
3. Karnataka 4. Andhra Pradesh Select the correct answer using the codes given below.
(a) 1, 2 and 3 only
(b) 2 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (a)

Q25. Consider the following:
1. Star tortoise 2. Monitor lizard
3. Pygmy hog 4. Spider monkey Which of the above are naturally found in India?
(a) 1, 2 and 3 only
(b) 2 and 3 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4

Ans: (a)

Q26. Consider the following fauna of India:
1. Gharial 2. Leatherback turtle
3. Swamp deer Which of the above is/are endangered?
(a) 1 and 2 only
(b) 3 only
(c) 1, 2 and 3
(d) None

Ans: (c)

Q27. If you walk through countryside, you are likely to see some birds stalking alon g-side the cattle to seize the insects disturbed by their movement through grasses.

Which of the following is/are such bird/birds?

1. Painted Stork 2. Common Myna
3. Black-necked Crane Select the correct a n-swer using the code given below.

(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q28. With reference to the International Union for Conservation of Nature and Na t-ural Resources (IUCN) and the Convention on International Trade in Endangered Sp e-cies of Wild Fauna and Flora (CITES), which of the following statements is/are cor-rect? [UPSC Prelims 2015]

1. IUCN is an organ of the United Nations and CITES is an international agreement b e-tween governments.
2. IUCN runs thousands of field projects around the world to better manage natural e n-vironments.
3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws.

Select the correct answer using the code gi v-en below.

(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q29. With reference to an organization known as „Birdlife International', which of the following statements is/are correct? [UPSC Prelims 2015]

1. It is a Global Partnership of Conservation Organizations.
2. The concept of 'biodiversity hotspots' originated from this organization.
3. It identifies the sites known /referred to as 'Important Bird and Biodiversity Areas'.

Select the correct answer using the code gi v-en below.

(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q30. Consider the following sanctuaries of India

1. Periyar 2. Dachigam
3. Sariska 4. Kanha Which one among the following is the correct sequence of location of the above sanctuaries from South to North?

(a) 1, 4, 2, 3
(b) 4, 1, 3, 2
(c) 1, 4, 3, 2
(d) 3, 1, 4, 2

Ans: (c)

Q31. Which of the following are UNESCO recognised world heritage sites?

1. Caves of Ajanta.
2. Temple and Caves at Ellora.
3. Mandapas of Mahabalipurarn.
4. Caves of Kanheri.

Select the correct answer using the codes gi v-en below

(a) 1 and 4
(b) 1, 2 and 3
(c) 1, 3 and 4
(d) 2, 3 and 4

Ans: (b)

Q32. Consider the following statements

1. Jim Corbett National Park is the oldest n a-tional park of india.
2. It was one of the nine tiger reserves created at the launch of the Project Tiger in 1973.
3. Initially it was named as 'Hailey National Park'.

Which of the statements given above are co r-rect?

(a) 1 and 2
(b) All of these
(c) 2 and 3
(d) 1 and 3 Directions (Q. 33 to 38): Match List -I with List-II and select the correct answer using the codes given below the lists.

Ans: (b)

Q33. List-I List-II

A. Biodiversity 1. G. Tansley
B. Wildlife 2. E.O. Wilson
C. Ecosystem 3. E. Haeckel
D. Ecology 4. W.T. Hornaday Codes:
A B C D
(a) 2 4 3 1
(b) 2 4 1 3
(c) 4 2 3 1
(d) 4 2 1 3

Ans: (b)

Q34. Consider the following pairs:
1. Nokrek Bio-sphere Reserve : Garo Hills
2. Logtak (Loktak) Lake : Barail Range
3. Namdapha National Park : Dafla Hills
Which of the above pairs is/are correctly matched?
(a) 1 only
(b) 2 and 3 only
(c) 1, 2 and 3
(d) None

Ans: (a)

Q35. Consider the following pairs :
1. Dampa Tiger Reserve : Mizoram
2. Gumti Wildlife Sanctuary : Sikkim
3. Saramati Peak : Nagaland Which of the above pairs is/are correctly matched?
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q36. List-I List-II
(Malor Biome) (Physical characterstics)
A. The Northern most of 1. Foristically poor (i.e., a the Temperate continuous belt across Formations North America and Northern Eurasia)
B. Arctic Tundra 2. Boreal Forest Vegetation
C. Marine 3. Pelagic division
D. The Terrestrial Biomes 4. Savanna woo d-land of the Tropics
5. Soviet Steppe and North American Prairie
Select the correct option from the codes given below:
A B C D
(a) 2 4 3 1
(b) 2 1 3 4
(c) 4 3 5 2
(d) 4 1 3 2

Ans: (b)

Q37. Match the following List I List II
(Biosphere Reserve) (Places)
A. Manas 1. Meghalaya
B. Pachmarhi 2. Asom
C. Nokrek 3. Madhya Pradesh
D. Achanakmar Amarkantak 4. Chhattisgarh
Codes A B C D A B C D
(a) 4 3 1 2
(b) 2 1 3 4
(c) 4 1 3 2
(d) 2 3 1 4

Ans: (d)

Q38. Match the following List I List II
(Biosphere Reserve) (State)
A. Nilgiri 1. Odisha
B. Manas 2. Madhya Pradesh
C. Panchmarhi 3. Tamul Nadu
D. Simes lipal 4. Asom Codes A B C D A B C D
(a) 3 2 4 1
(b) 1 4 2 3
(c) 3 4 2 1
(d) 1 2 4 3

Ans: (c)

Q39. Match items given in column I with those given in column II.
Column I Column II
A. Rhinoceros p. Bharatpur
B. Tiger project in q. Tropical evergreen Karnataka forest
C. Assemblage r. Kaziranga protection
D. Silent valley s. National park
t. Bandipur
(a) A-t, B-r, C-p, D-s
(b) A-q, B-s, C-r, D-q
(c) A-s, B-r, C-q, D-t
(d) A-r, B-t, C-p, D-q

Ans: (d)

Q40. Which one of the following is the co r-rect matched pair of an endangered animal and National Park ?
(a) Rhinoceros - Kaziranga National Park
(b) Wild ass - Dudhwa National Park
(c) Great Indian - Keoladeo National Park bustard
(d) Lion - Corbett National Park

Ans: (a)

Q41. Read the two statements A and B
Statement A : Diversity observed in the e n-tire geographical area is called gamma d i-versity.
Statement B : Biodiversity decreases from high altitude to low altitude.
Identify the correct choice from those given below :
(a) statement A is correct, B is wrong
(b) statement B is correct, A is wrong
(c) both the statements A and B are correct
(d) both the statements A and B are wrong

Ans: (a)

Q42. Read the statement regarding a stable community and choose the correct option:
A. Must be resistant to occasional distur b-ances
B. Should show much variation in productivi-ty from year to year
C. Must be resistant to invasions by alien species
(a) A and B are correct
(b) A, B and C are correct
(c) Only A is correct
(d) A and C are correct

Ans: (d)

Q43. Find the wrongly matched pair:
(a) Endemism- Species confined to a region and not found anywhere else
(b) Hot spots- Western Ghats
(c) Sacred groves- Jaintia Hills of Rajasthan
(d) Ex situ conservation- Zoological park

Ans: (c)

Q44. Conservation of flora and fauna in its natureal habitat is :
(a) In-situ conservation
(b) Ex-situ conservation
(c) In vivo conservation
(d) In vitro conservation

Ans: (a)

Q45. Which of the following represent ma x-imum number of species among global bi o-diversity?
(a) Lichens
(b) Fungi
(c) Mosses and Ferns
(d) Algae

Ans: (b)

Q46. With reference to 'Red Sanders', sometimes seen in the news, consider the following statements: (IAS Prelims 2016)
1. It is a tree species found in a part of South India.
2. It is one of the most important trees in the tropical rain forest areas of South India.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q47. Recently, for the first time in our country, which of the following States has declared a particular butterfly as „State Butterfly'? (IAS Prelims 2016)
(a) Arunachal Pradesh
(b) Himachal Pradesh
(c) Karnataka
(d) Maharashtra

Ans: (d)

Q48. In which of the following regions of India are you most likely to come across the „Great Indian Hornbill' in its natural habi-tat? (IAS Prelims 2016)
(a) Sand deserts of northwest India
(b) Higher Himalayas of Jammu and Kashmir
(c) Salt marshes of western Gujarat
(d) Western Ghatsw

Ans: (d)

Ecosystem Problems

LEVEL-1

Q1. Green house effect is warming due to

(a) infra-red rays reaching earth
(b) moisture layer in atmosphere
(c) increase in temperature due to increase in carbon d i-oxide concentration of atmosphere
(d) ozone layer of atmosphere.

Ans: (c)

Q2. Acid rain is due to increase in atmo s-pheric concentration of

(a) ozone and dust
(b) CO2 and CO
(c) SO2 and CO
(d) SO2 and NO2.

Ans: (d)

Q3. The two great industrial tragedies namely, MIC and Chernobyl tragedies r e-spectively occurred where and at which time?

(a) Bhopal 1984, Ukrain 1986
(b) Bhopal 1986, Russia 1988
(c) Bhopal 1984, Ukrain 1990
(d) Bhopal 1984, Ukrain 1988

Ans: (a)

Q4. If there was no CO2 in the earth's at-mosphere, the temperature of earth's sur-face would be

(a) higher than the present
(b) dependent on the amount of oxygen in the atmo s-phere
(c) same as present
(d) less than the present.

Ans: (d)

Q5. How carbon monoxide, emitted by a u-tomobiles, prevents transport of oxygen in the body tissues?

(a) by forming a stable compound with haemoglobin
(b) by obstructing the reaction of oxygen with haem o-globin
(c) by changing oxygen into carbon dioxide
(d) by destroying the haemoglobin.

Ans: (a)

Q6. What is B.O.D.?

(a) The amount of O2 utilized by organisms in water
(b) The amount of O2 utilized by micro -organisms for decomposition
(c) The total amount of O2 present in water
(d) All of the above.

Ans: (b)

Q7. Which one of the following pairs is mismatched?

(a) fossil fuel burning – release of CO2
(b) nuclear power – radioactive wastes
(c) solar energy – greenhouse effect
(d) biomass burning – release of CO2.

Ans: (c)

Q8. Acid rain concentrated in the eastern portions of the United States is primarily the result of

(a) nuclear power plants in the region
(b) coal-burning power plants in the Midwest
(c) hydro electric power plants in northeastern Canada
(d) off-shore oil drilling rigs along the east coast of the United States

Ans: (b)

Q9. Alien species that cause the most harm are those that

(a) struggle to fit into new ecosystems and eventually die out.
(b) eventually become naturalized
(c) become invasive
(d) become agricultural products

Ans: (c)

Q10. Environmental pollutants such as PCB's contaminate oceans and other aqua t-ic systems. Plankton in the ocean become contaminated by PCB's and pass this along through the food chain. A pregnant woman has been cautioned to limit her consumption of food that may be high in PCBs. If she consumes food from a near by contaminated ocean, we would expect that the most co n-taminated foods would be:

(a) shrimp
(b) clams
(c) fish that eat shrimp
(d) kelp and other ocean plants

Ans: (b)

Q11. In clean water the concentration of

(a) BOD is low but DO is high
(b) Both BOD and DO are high
(c) BOD is high but DO is low
(d) Both BOD and DO are low

Ans: (a)

Q12. Examining an old abandoned home several months after a flood, a relief worker suddenly experiences difficulty breathing. At the hospital she learns that she experienced:

(a) a chronic respiratory illness more common in the developed world.
(b) a chronic respiratory illness more common in the developing world.
(c) an acute respiratory illness more common in the developed world.
(d) an acute respiratory illness more common in the developing world.

Ans: (c)

Q13. Harmful algal booms appear to be linked to unusually high levels of nutrient pollution. Which of the following is the most likely source of nutrient pollution in a river drainage system associated with an algal bloom?

(a) a coal-fired power plant
(b) a nuclear power plant
(c) chicken and hog farms
(d) a large shopping mall

Ans: (c)

Q14. Health problems associated with indoor air pollution in developing countries is most commonly associated with:

(a) chlorine gas released from tap water.
(b) the use of biofuels for cooking and heating.
(c) poor hygiene and sanitation inside the home.
(d) the widespread use of pesticides to control disease vectors. 15 The formation of ozone hole in the Antarctic region has been a cause of concern. What could be the reason for the formation of this hole ?

Ans: (b)

(a) Presence of prominent tropo-spheric turbulence; and inflow of chlorofluorocarbons.
(b) Presence of prominent polar front and stratospheric clouds; and inflow of chlorofluorocarbons.
(c) Absence of polar front and stratospheric clouds; and inflow of methane and chlorofluorocarbons.
(d) Increased temperature at polar region due to global warming.

Ans: (b)

Q16. Recent studies indicate that two of the most dangerous components of air pollution around major cities in the developed nations are:

(a) fine particles and sulfur pollution.
(b) carbon monoxide and ozone.
(c) lead and volatile organic compounds.
(d) radon and carbon monoxide.

Ans: (a)

Q17. The decline of the polar ice caps because of increasing temperatures at the poles will

(a) increase the amount of fresh water available for human use.
(b) decrease the largest reserve of fresh water on Earth.
(c) increase the amount of fresh water available in aquifers.
(d) decrease global sea levels.

Ans: (b)

Q18. The developed countries of the world have contributed the most to global climate change. By applying the polluter pays and equity principles, we would expect that the:

(a) developed countries will provide funds for adaptations in the developing countries.
(b) developing countries will provide funds for adaptations in the developed countries.
(c) precautionary principle will guide the payment of compensation to developed countries.
(d) stabilization wedge approach to global climate change will help to equalize the funds for adaptations.

Ans: (a)

Q19. The evolution of pesticide resistance resurgence, and secondary pest outbreaks are only some of the problems that result from reliance on

(a) crop rotation and biological controls, which disrupt the natural dynamics of ecosystems.
(b) pesticides, creating the need to alternate between a pesticide and an herbicide every other year.
(c) rodenticides to kill weeds and insect pests and prevent the spread of viral diseases.
(d) pesticides, creating a never-ending pesticide treadmill requiring new pest-fighting strategies.

Ans: (d)

Q20. The most dramatic temperature shifts in the past few decades have been

(a) on land near the equator.
(b) in the oceans nearest the equator.
(c) in the north and south polar regions.
(d) in the innermost regions of the North. American and African continents.

Ans: (c)

Q21. The most effective way to reduce GHG emissions is to increase

(a) the production of electric cars.
(b) energy efficiency and renewable energy.

(c) our reliance on widely available natural gas
(d) the use of coal gasification plants and scrubber technologies to reduce sulfur emissions.

Ans: (b)

Q22. The most likely sustainable solutions of ecological problems are

(a) Incorporate the concerns of eco nomists, ecologists, and sociologists.
(b) emphasize ecology over all other fields.
(c) emphasize economics over all other fields.
(d) emphasize ecological and social is - "Use over economic concerns.

Ans: (a)

Q23. The negative impacts of ozone poll u-tion on forests are expected to increase as

(a) ocean levels rise and wind patterns shift.
(b) organisms spread northward because of warming climate conditions.
(c) the increasing demand for timber further stresses the growth of trees,
(d) temperatures increase and precipitation becomes more unpredictable.

Ans: (d)

Q24. The pesticide that directly attacks the nervous system is (a) Aldrin (b) DDT

(c) Organic Phosphates (d) None of the above
(a) causing excessive secretion of stomach acids.
(b) mimicking the effects of estrogenic hormones.
(c) causing muscle spasms and cramping in major mu s-cle groups.
(d) greatly reducing the ability of the intestines to a b-sorb nutrients.

Ans: (a)

Q25. The pesticides that also function as endocrine disruptors cause disease by

Ans: (b)

Q26. The quality of the final treated wastewater effluent from a modern trea t-ment plant is typically:

(a) lower in organic and nutrient content than the body of water into which it is discharged.
(b) lower in organic content but higher in nutrient co n-tent than the body of water into which it is discharged.
(c) higher in organic and nutrient content than the body of water into which it is discharged.
(d) higher in organic content but lower in nutrien t con-tent than the body of water into which it is discharged.

Ans: (a)

Q27. Brightly colored antique children's toys from before 1970 may be colored with paints that are contaminated with:

(a) heavy metals
(b) toxic plastic compounds.
(c) synthetic organic compounds.
(d) synthetic inorganic compounds.

Ans: (a)

Q28. By design, the molecules that resist biodegradation and include some of the most problematic persistent organic pollu-tants are the :

(a) synthetic organic compounds
(b) synthetic inorganic compounds
(c) recycled heavy metals
(d) chlorinated heavy metals

Ans: (a)

Q29. Carcinogens arc dangerous because they affect (a) oxygen-carrying red blood cells.

(b) the ability of the lining of the lungs to a b-sorb oxygen.
(c) DNA molecules inside cells.
(d) the ability to absorb nutrients in the wall of the intestines.

(a) producing chlorinated gases that reflect back a si g-nificant amount of ultraviolet light.
(b) releasing carbon monoxide into the stratosphere, which reacts with the oxygen in ozone.
(c) releasing gases into the stratosphere that block the enzymes that create ozone.
(d) contributing chlorine, which acts as a catalyst in the breakdown of ozone.

Ans: (c)

Q30. CFCs primarily contribute to the d e-struction of the ozone by:

Ans: (d)

Q31. At an international conference on global climate change, a representative of a developing country admits that each year, his country contributes the same amount of greenhouse gases to the atmosphere as a particular developed nation. However, he argues that because his country has only 10% of the wealth of that developed nation, the developed nation should pay much more

of the costs of adaptation. This represent atives arguments illustrate the:

(a) polluter pays principle.
(b) precautionary principle.
(c) equity principle.
(d) conservation of the commons principle.

Ans: (c)

Q32. Concerned with the expensive disposal their hazardous wastes, a company learns that it can purchase another chemical that will neutralize the company's hazardous wastes into a nontoxic form. The strategy used by this company is most consistent with which of the following hazardous-waste disposal system methods ?

(a) secure landfill
(b) deep-well injection
(c) on-site surface impoundment
(d) best-demonstrated available technology

Ans: (d)

Q33. Freshwater becomes polluted:

(a) by oil spills in ocean water moving inland.
(b) primarily by contaminants from aquifers moving to surface waters.
(c) as a result of eutrophication.
(d) from runoff associated with urban areas chemicals used in farming in rural areas.

Ans: (d)

Q34. In developing countries, contaminated water is responsible for the deaths of more than 1.6 million people. Contributing to this problem is the use of

(a) groundwater for consumption and the disposal of human sewage.
(b) groundwater for consumption and the disposal of human sewage in surface waters.
(c) surface waters for consumption and the disposal of human sewage.
(d) surface waters for consumption and the disposal of human sewage in groundwater.

Ans: (c)

Q35. In general, temperatures along an ocean coastline vary less than temperatures 100 miles inland. This moderation of te mperatures along coastlines is because

(a) as the oceans evaporate it cools off the coastlines.
(b) the sun shines more intensely away from the ocean coastlines
(c) ocean temperatures change more quickly than air temperatures.
(d) ocean temperatures do not change as quickly as air temperatures.

Ans: (d)

Q36. Ozone levels increase in the atmo sphere when volatile organic compounds (VOCs) are present because:

(a) less nitric oxide is available to react with ozone.
(b) VOCs react with atmospheric nitrogen to form ozone.
(c) VOCs release ozone whe n they are broken apart by solar energy.
(d) more carbon dioxide is available to contribute add itional oxygen for ozone formation.

Ans: (a)

Q37. The greatest progress in reducing a tmospheric levels of lead pollution resulted from

(a) the elimination of leaded gas.
(b) the switch from lead to graphite in pencils.
(c) the development of new types of batteries that use lithium instead of lead.
(d) new types of lead scrubbers on smokestacks that removed lead from the air.

Ans: (a)

Q38. The inside of a car or greenhouse would not heat up as much in the presence of sunshine if

(a) air was circulated within the car or within the gree nhouse.
(b) infrared radiation passed through glass as easily as sunlight.
(c) infrared radiation could not pass through glass as easily as sunlight.
(d) sunlight could pass through glass more easily than through air.

Ans: (b)

Q39. Villagers living in a heavily forested region surrounding a remote district in Punjab decided to reduce air pollution in their village. In the autumn season, after the leaves had fallen from the trees, the villa gers blew all of the dead leaves into the vi llage pond. About 8 months later, they noticed a large number of dead fish in the pond. What is the most likely cause of the fish kill?

(a) the dead leaves released poisons that killed the fish.
(b) the decomposing leaves depleted the levels of ox ygen.

(c) bacteria fed on the leaves and then the bacteria i n-fected the fish.
(d) carbon dioxide from the decaying leaves reached toxic levels and killed the fish.

Ans: (b)

Q40. Which of the following represents an alarming positive feedback loop of global warming ?

(a) increasing temperature raise humidity, which further increases temperatures.
(b) decreased pH of the ocean increases the rate at which carbon dioxide is absorbed by the oceans from the atmosphere.
(c) increased use of fossil fuels adds sulfate aerosols i n-to the atmosphere, which traps more heat.
(d) increased levels of atmospheric c arbon dioxide i n-creases photosynthesis, which further increases carbon dioxide atmospheric levels.

Ans: (a)

Q41. Which one of the following generally increases the pollution of the air?

(a) bright sunlight.
(b) generation of hydroxyl radicals.
(c) sea salt aerosols entering the air over an ocean.
(d) gases released by a volcanic eruption.

Ans: (d)

Q42. Wood pellets are produced from the waste sawdust of lumber and paper mills. Home-heating stoves burning these pellets can heat homes directly, ins tead of relying on other energy sources. Heating your home with wood pellets is :

(a) sustainable, less polluting, and about 3 times as eff i-cient as heating a home using electricity from a coal -fired power plant.
(b) sustainable, slightly more polluting, and is about 30% more efficient than using electricity from a coal -fired power plant.
(c) not sustainable but is less polluting and is about as efficient as using electricity from a coal -fired power plant.
(d) not sustainable and actually pollutes more than u s-ing electricity from a coal-fired power plant.

Ans: (a)

Q43. The Clean Development Mechanism (CDM), a mechanism to reduce greenhouse gas emission as per Kyoto Protocol implies that

(a) industrial countries receive carbon credits by fun d-ing carbon saving projects in another relatively affluent nation
(b) industrial countries reduce their carbon emission by using environment friendly technology in production
(c) developed countries inve st in carbon reduction in developing countries and receive carbon credit in return
(d) developed nations purchase carbon credit from other nations

Ans: (b)

Q44. A gardener applied heavy doses of the same insecticide to his garden for two co n-secutive years to kill squash bugs. During the third year, the man called in an expert to explain why he had an abundance of new pests that were destroying her garden. The expert explained that the abundant new pests were largely due to his previous use of a insecticide in a phenomenon known as

(a) pesticide resistance
(b) secondary-pest outbreak
(c) triennial pest emergence
(d) bounce back resurgence

Ans: (b)

Q45. A gardener has a large garden and decides this year he will not let the pests get beyond control. At the earliest sign of insect pests, he applies an organic insecticide and continues to apply it every month throug h-out the growing season. The next year he decides not to use any insecticides, thinking that he must have eliminated the pests with the prior year's treatments.

Unfortunately, the pests reappear in numbers greater than he has ever seen before, and his plants are destroyed.

Investigating this phenomenon, he learns that he has just experienced a phenomenon known as

(a) resurgence
(b) pesticide resistance
(c) natural selection
(d) emergence

Ans: (a)

Q46. Moss invades and establishes itself on bare rock, accumulating the beginnings of soil. After several years, enough soil has b e-come established that grasses begin to grow where there was once bare rock.

Without the moss building up soil, the grasses would have had no chance. The mosses

changed the environment enough to permit grasses to grow in a process called:
(a) sublimation.
(b) facilitation.
(c) regeneration.
(d) improvisation.

Ans: (b)

Q47. Most of the wheat, rice and corn raised in the world has resulted from genetic eng i-neering of one sort or another, either by crossing certain varieties or deliberately transferring genes using transgenic tec h-niques. These methods select for plants that produce their own defenses against pests with chemicals or physical barriers. Helping to feed the world, this represents an exa m-ple of :
(a) cultural control
(b) natural enemies control
(c) genetic control
(d) natural chemical control

Ans: (c)

Q48. The eagle predators, the amount of acorns produced annually, nesting sites in the trees, and cold winter temperatures lim-its the squirrel population in the Punjab region.
The many factors listed above that can affect the squirrel population represent:
(a) environmental resistance.
(b) the carrying capacity of the squirrel population.
(c) the squirrel's life history.
(d) the biotic potential of the squirrel population.

Ans: (a)

Q49. The most widespread negative health impact of air pollution is the
(a) destruction of the cellular component of the immune system.
(b) loss of the ability to absorb vital nutrients by the d i-gestive system.
(c) disruption of the signaling processes of the end o-crine system.
(d) chronic stress that weakens many systems of the body.

Ans: (d)

Q50. The population of a particular type of fish, called Kubani found and in the Chilka lake only, is under heavy fishing pressure. If too many Kubians are caught, its population will crash and future years of fishing Kub a-ni will suffer.
Kubani can exhibit logistic growth under ce r-tain circumstances.
Assuming logistic growth, it would be best to manage Kubani population by permitting the harvesting of just enough fish to keep the Kubani population.
(a) at 1/10 of its carrying capacity.
(b) at half its carrying capacity.
(c) at its full carrying capacity.
(d) above its carrying capacity.

Ans: (b)

Q51. In the lower regions of Uttaranchal, a toxic weed called leafy spurge was acc i-dentally introduced and has grown and spread rapidly, covering millions of acres of grasslands.
Leafy spurge is generally avoided by cattle and horses and may be toxic to them. Thus, grasslands where leafy spurge has spread has been damaged by the invasion of this plant. Plants such as leafy spurge can double their population size every year in part because of their efficient production of large amounts of seeds. Populations that can double every year, such as leafy spurge,
(a) can do so endlessly, eventually covering all of the land on Earth.
(b) exhibit constant growth increasing by the same amount every year.
(c) exhibit a state of equilibrium when they are sprea d-ing.
(d) exhibit exponential growth as they spread to new regions.

Ans: (d)

Q52. Which one of the following statements best reflects the overall position of current science on the role of biodiversity in ecosys-tems?
(a) The more species in an ecosystem, the greater the biomass production.
(b) The more species in an ecosystem, the greater the drought resistance.
(c) The effects of biodiversity on the functioning of an ecosystem are not consistent.
(d) Almost every species in an ecosystem is essential to maintain the overall ecosystem.

Ans: (c)

Q53. Widely applying pesticides may lead to resurgence and secondary-pest outbreak because:

(a) the insecticide also killed the natural predators of the pests.
(b) the plants have now lost their ability to fight the pests.
(c) pesticides typically h arm plants in ways that take several years to appear.
(d) new species that are more resistant to insecticides have evolved.

Ans: (a)

Q54. Protection of endangered species by preserving the entire ecosystem is known as:

(a) In-situ conservation
(b) Ex-situ conservation
(c) Biodiversity conservation
(d) None of the above

Ans: (b)

Q55. Ramsar Convention 1971 aimed at the conservation of

(a) Wasteland
(b) Wetland
(c) Desert
(d) All of the above

Ans: (b)

Q56. Building on scientific research and careful measurements, the 1987 Montreal Protocol represented :

(a) global stewardship to limit the destruction of the ozone.
(b) agreements to maintain sustainable levels of agricultural productivity.
(c) sound science to better understand the impact of a cid precipitation.
(d) stewardship by the Canadian government to limit the production of greenhouse gases.

Ans: (a)

Q57. Over the past 20 years, vultures in I ndia and Pakistan have declined by more than 95% due to :

(a) increased hunting and fear from villagers that the vultures will kill their domestic cattle.
(b) the destruction of their nesting habitat in cliffs bo rdering the Indus River.
(c) the spread of respiratory viruses common in dome stic chickens.
(d) the widespread use of an anti -inflammatory drug in cattle that were eaten by vultures.

Ans: (d)

Q58. 'El Nino' associated with the formation of the South West Monsoon of India is

(a) an abnormally warm ocean current
(b) a periodic warm air-mass
(c) a periodic warm wind
(d) a periodic low pressure centre

Ans: (a)

Q59. Ozone holes are more pronounced at the

(a) Equator
(b) Tropic of Cancer
(c) Tropic of Capricorn
(d) Poles

Ans: (d)

Q60. Acid rains are produced by

(a) excess NO2 and SO2 from burning fossil fuels
(b) excess production of NH3 by industry and coal gas
(c) excess release of carbon monoxide by incomplete combustion
(d) excess formation of CO2 by combustion and animal respiration. (1988, 89)

Ans: (a)

Q61. „BioCarbon Fund Initiative for Su stainable Forest Landscapes' is managed by the (IAS Prelims 2015)

(a) Asian Development Bank
(b) International Monetary Fund
(c) United Nations Environment Programme
(d) World Bank

Ans: (d)

Q62. Which one of the foll owing is associa ted with the issue of control and phasing out of the use of ozone -depleting substances? (IAS Prelims 2015)

(a) Bretton Woods Conference
(b) Montreal Protocol
(c) Kyoto Protocol
(d) Nagoya Protocol

Ans: (b)

Q63. What is Rio+20 Conference, of ten mentioned in the news? (IAS Prelims 2015)

(a) It is the United Nations Conference on Sustainable Development
(b) It is a Ministerial Meeting of the World Trade O rganization
(c) It is a Conference of the Inter -governmental Panel on Climate Change
(d) It is a Conference of the Member Countries of the Convention on Biological Diversity

Ans: (a)

LEVEL-2

Q1. Biomass gasification is considered to be one of the sustainable solutions to the power crisis in India. In this context, which of the following statements is/are correct?

1. Coconut shells, groundnut shells and rice husk can be used in biomass gasification.
2. The combustible gases generated from b i-omass gasification c onsist of hydrogen and carbon dioxide only.
3. The combustible gases generated from can be used for direct heat generation but not in internal combustion engines.

Select the correct answer using the codes gi v-en below :

(a) 1 only
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

Ans: (c)

Q

2. Eutrophication in the Chesapeake Bay along the eastern edge of Maryland bas r e-sulted in low oxygen levels in the water and alteration of food webs. The cause of this eu-trophication appears to be pollution that co n-tains high levels of:

1. nitrogen 2. carbon
3. phosphorus 4. sulphur Which of the above is/are correct?

(a) 1 and 3
(b) 2 and 4
(c) 1, 2 and 3
(d) All of these

Ans: (a)

Q

3. Consider the following statements: 1. Ky o-to protocol came into force in the year 2005.
2. Kyoto protocol deals primarily with the depletion of the ozone layer.
3. Methane as a green house gas is more harmful than carbon dioxide.

Which of the statements given above is/are correct?

(a) 1 and 2
(b) 1 and 3
(c) 1 only
(d) 3 only

Ans: (b)

Q

4. Compared to 50 years ago, the thinning ozone layer has produced dramatic increases in cases of :

1. asthma 2. color blindness 3. cataracts 4. skin cancer Which of the above is/are co r-rect?

(a) 1 and 2
(b) 3 and 4
(c) 1, 2 and 3
(d) All of these

Ans: (b)

Q

5. If atmospheric carbon dioxide was elim i-nated from our atmosphere, we would expect that :

1. the Earth would cool considerably
2. photosynthesis would dramatically increase
3. the Earth would heat up considerably
4. photosynthesis would dramatically d e-crease Which of the above is/are correct?

(a) 1 and 2
(b) 2 and 3
(c) 1 and 4
(d) 2 and 4

Ans: (c)

Q

6. Due to their extensive rice cultivation, some regions may be contributing to global warming. To what possible r eason/ reasons is this attributable ?

1. The anaerobic conditions associated with rice cultivation cause the emission of m e-thane
2. When nitrogen based fertilizers are used, nitrous oxide is emitted from the cultivated soil.

Which of the statements given above is / are correct ?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q

7. Gases commonly referred as green house gases are : 1. CH_4 2. CO_2
3. CFC 4. NH_3 Which of the above is/are cor-rect?

(a) 1 and 4
(b) 2 and 3
(c) 1, 2 and 3
(d) All of these

Ans: (c)

Q

8. Fertilizers cause
1. eutrophication of water bodies
2. survival of most microorganisms
3. destruction of crumb structure of soil
4. all the above Which of the above is/are correct?
(a) 1 and 3
(b) 2 and 4
(c) 1, 2 and 3
(d) All of these

Ans: (a)

Q

9. Chipko movement is
1. A movement of political strength held in Assam under the supervision of Rajeev Ga n-dhi
2. A environment movement held in uttara k-hand under the guidance of sunderlal bahu-guve.
3. A movement for independence under the guidance of Nehruji
4. A movement of independence under the guidance of Gandhi ji.
Which of the following statements *(s)* is/are correct?
(a) 1 only
(b) 2 only
(c) 3 only
(d) Both 1 and 4

Ans: (b)

Q10. Eutrophication of a lake most likely is the result of 1. Elevated nitrogen gas level in water.
2. Elevated phosphorus levels in water.
3. Excessive concentration of CO_2.
4. A decrease in oxygen content of the water.
Which of the above is/are correct?
(a) 1 only
(b) 1 and 3
(c) 1 and 2
(d) 1 and 4

Ans: (c)

Q11. Ozone layer can be destroyed by pollutants such as 1. Hydro carbons 2. Carbon mono oxide
3. Sulphur dioxide 4. Nitrogen oxides
(a) 1 and 2 *(b)* 2 and 3 *(c)* 1 and 3 *(d)* 1 and 4

Ans: (d)

Q12. Climatologist warm of a tipping point when global temperature trigger cat a-strophic events and rise levels rise more than 50 feets. What would cause the sea le v-el rise so greatly and how much warmer does the world need to get for this tripping point to happen
1. 1°C
2. 3°C
3. Melting of Greenland ice sheet
4. thermal expansion of oceans Which of the above is/are correct?
(a) 1 and 3
(b) 1 and 2
(c) 2 and 3
(d) 2 and 4

Ans: (c)

Q13. One Carbon Credit is defined as ____ .
1. Credit permit to release one ton of carbon dioxide.
2. providing loans to establish a unit which produces carbon dioxide for industrial use.
3. Finding out one new business which can use and recycle greenhouse gases.
Which of the following statements *(s)* is/are correct?
(a) 3 only
(b) 2 only
(c) 1 only
(d) All 1, 2 and 3

Ans: (c)

Q14. Humans have contributed to habitat destruction by
1. clearing land for farming
2. excessive use of chemicals
3. producing green-house gases through use of fossil fuels
4. exploitation of land and water for mining of scarce resources Which of the above is/are correct?
(a) 1 and 2
(b) 2 and 3
(c) 1, 2 and 3
(d) All of these

Ans: (d)

Q15. Global climate change threatens coral reefs by

1. increasing the temperature
2. decreasing the temperature
3. increasing the pH of the oceans
4. decreasing the pH of the oceans Which of the above is/are correct?

(a) 1 and 2
(b) 2 and 3
(c) 1 and 4
(d) 2 and 4

Ans: (c)

Q16. The acidification of oceans is increa s-ing. Why is this phenomenon a cause of concern?

1. The growth and survival of calcareous phytoplankton will be adversely affected.
2. The growth and survival of coral reefs will be adversely affected.
3. The survival of some animals that have phytoplanktonic larvae will be adversely a f-fected.
4. The cloud seeding and formation of clouds will be adversely affected.

Which of the statements given above is /are correct?

(a) 1, 2 and 3
(b) 2 only
(c) 1 and 3
(d) 1, 2, 3 and 4

Ans: (a)

Q17. Which of the following countries suffer from the acid rains?

1. Canada 2. France
3. Norway 4. Germany Select the correct a n-swers from the codes given below:

Codes:

(a) 1 and 2
(b) 1 and 3
(c) 2 and 3
(d) 3 and 4

Ans: (b)

Q18. Which of the following statements about Radioactive pollution are correct?

1. It causes genetic changes in the animals.
2. It causes disbalance among different mi n-erals in the soil.
3. It hinders blood circulation.
4. It causes cancers.

Select the correct answer from the codes gi v-en below:

Codes:

(a) 1 and 2
(b) 1 and 4
(c) 1, 3 and 4
(d) 2, 3 and 4

Ans: (b)

Q19. Which of the following conditions ind i-cate the impact of global warming?

1. Melting of glaciers
2. Rise in sea level
3. Changes in weather conditions
4. Rise in global temperature Select the co r-rect answer from the codes given below:

Codes:

(a) 1 and 2
(b) 1, 2 and 3
(c) 2, 3 and 4
(d) 1, 2, 3 and 4

Ans: (d)

Q20. As per National Aeronautics and Space Adminis-tration

(NASA) research scientists found that co n-centrations of mercury near the ground level had increased in the Arctic Sea by mercury - pumping reaction which takes place because -

1. of open water in a lead is much warmer than the air above it.
2. of the temperature difference, the air above the lead churns like the air above a b oiling pot.
3. the mixing is so strong that it actually pulls down mercury from a higher layer of the a t-mosphere to near the surface.

Select the answer from the codes given b e-low-

(a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) All of the above

Ans: (d)

Q21. A new nuclear waste disposal strategy announced by United States include-

1. a "pilot interim store" will become opera-tional in 2021

2. a larger "full-scale interim store" will open be open by 2025
3. an underground disposal facility to be e s-tablished by 2048 to permanently dispose of the material.
4. a new organisation will be established to manage the siting, development and operation of the future waste stores.
Select the answer from the codes given b e-low-
(a) 1, 2 and 3
(b) 2, 3 and 4
(c) 1, 3 and 4
(d) All of the above

Ans: (d)

Q22. Which of the following statements are correct ?
1. A new study has found that changes in s o-lar activity contributed no more than 10 per cent to global warming in the 20th century published in the journal Environmental R e-search Letters.
2. It has been proposed that cosmic rays may have a role in cooling the earth by encoura g-ing clouds to form, which subsequently r e-flect the sun's rays back into space.
3. Researchers found high correlation b e-tween cosmic rays and global temperatures occurring every 22 years.
Select the answer from the codes given b e-low- *(a)* 1 only *(b)* 1 and 2 only
(c) 2 and 3 only *(d)* All of the above

Ans: (b)

Q23. There is a concern, over the increases in harmful algal blooms in the seawaters of India. What could be the causative factors for this phenomenon?
1. Discharge of nutrients from the estuaries.
2. Run-off from the land during the monsoon.
3. Upwelling in the seas.
Select the correct answer from the codes gi v-en below: *(a)* 1 only *(b)* 1 and 2
(c) 2 and 3 *(d)* 1, 2 and 3

Ans: (d)

Q24. With reference to India, consider the following Central Acts
1. Import and Export (Control) Act, 1947
2. Mining and Mineral Development (Regula-tion) Act, 1957
3. Customs Act, 1962
4. Indian Forest Act, 1927 Which of the above Acts have relevance to/bearing on the biodiversity conservation in the country ?
(a) 1 and 3
(b) 2,3 and 4
(c) 1,2,3 and 4
(d) None

Ans: (c)

Q25. Biomass gasification is considered to be one of the sustainable solutions to the power crisis in India. In this context, which of the following statements is/are correct?
1. Coconut shells, groundnut shells and rice husk can be used in biomass gasification.
2. The combustible gases generated from b i-omass gasification consist of hydrogen and carbon dioxide only.
3. The combustible gases generated from b i-omass gasification can be used for direct heat generation but not in internal combustion e n-gines.
Select the correct answer using the codes gi v-en below : *(a)* 1 only *(b)* 2 and 3
(c) 1 and 3 *(d)* 1, 2 and 3

Ans: (c)

Q26. The safest method for biomedical waste disposal is: 1. Incineration
2. Autoclaving
3. Sharp pit encapsulation
4. Precipitation Which of the above is/are correct? *(a)* 1 and 2 *(b)* 1 and 3
(c) 1, 2 and 3 *(d)* 1, 2, 3 and 4

Ans: (b)

Q27. Forests that experience high levels of acid precipitation expose trees to soil that has :
1. more dissolved calcium
2. more dissolved aluminium
3. less dissolved calcium

4. less dissolved aluminium Which of the above is/are correct? *(a)* 1 and 2 *(b)* 2 and 3 *(c)* 1 and 4 *(d)* 2 and 4

Ans: (b)

Q28. Excessive exposure of humans to UV - rays results in 1. damage to immune system
2. damage to lungs
3. skin cancer
4. peptic ulcers Which of the above is/are correct? *(a)* 1 and 2 *(b)* 2 and 3 *(c)* 1 and 3 *(d)* 2 and 4

Ans: (c)

Q29 Gases commonly referred as green house gases are : 1. CH4 2. CO2
3. CFC 4. NH3 Which of the above is/are correct? *(a)* 1 and 4 *(b)* 2 and 3 *(c)* 1, 2 and 3 *(d)* 1, 2, 3 and 4

Ans: (c)

Q30. Climatologist warn of a tipping point when global temperature trigger cat a-strophic events and rise levels rise more than 50 feets. What would cause the sea le v-el rise so greatly and how much warmer does the world need to get for this tripping point to happen
1. 1°C
2. 3°C
3. Melting of Greenland ice sheet
4. thermal expansion of oceans Which of the above is/are correct? *(a)* 1 and 3 *(b)* 1 and 3 *(c)* 2 and 3 *(d)* 2 and 4

Ans: (c)

Q31. Due to improper/ indiscriminate di s-posal of old and used computers or their parts, which of the following are released into the environment as e-waste?
1. Beryllium 2. Cadmium
3. Chromium 4. Heptachlor
5. Mercury 6. Lead
7. Plutonium Select the correct answer using the codes given below. *(a)* 1, 3, 4, 6 and 7 only *(b)* 1, 2, 3, 5 and 6 only *(c)* 2, 4, 5 and 7 only *(d)* 1, 2, 3, 4, 5, 6 and 7

Ans: (b)

Q32. Which of the following can be found as pollutants in the drinking water in some parts of India?
1. Arsenic 2. Sorbitol
3. Fluoride 4. Formaldehyde
5. Uranium Select the correct answer using the codes given below. *(a)* 1 and 3 only *(b)* 2, 4 and 5 only *(c)* 1, 3 and 5 only *(d)* 1, 2, 3, 4 and 5

Ans: (a)

Q33. Consider the following international agreements : 1. The International Treaty on Plant Genetic Resources for Food and Agri-culture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention Which of the above has/have a bearing on the biodive r-sity? *(a)* 1 and 2 only *(b)* 3 only *(c)* 1 and 3 only *(d)* 1, 2 and 3

Ans: (d)

Q34. Consider the following statements r e-garding 'Earth Hour':
1. It is an initiative of UNEP and UNESCO.
2. It is a movement in which the participants switch off the lights for one hour on a certain day every year.
3. It is a movement to raise the awareness about the climate change and the need to save the planet.
Which of the statements given above is/are correct?
(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q35. With reference to a conservation organization called "Wetlands International', which of the following statements is/ are correct?

1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
2. It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q36. Other than poaching, what are the possible reasons for the decline in the population of Ganges River Dolphins?

1. Construction of dams and barrages on rivers
2. Increase in the population of crocodiles in rivers
3. Getting trapped in fishing nets accidentally
4. Use of synthetic fertilizers and other agricultural chemicals in crop-fields in the vicinity of rivers Select the correct answer using the code given below.

(a) 1 and 2 only
(b) 2 and 3 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (c)

Q37. Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?

1. They are highly resistant to degradation in the environment.
2. They are able to accumulate in humans and animals.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q38. With reference to „Eco -Sensitive Zones', which of the following statements is/are correct?

1. Eco-Sensitive Zones are the areas that are declared under the Wildlife (Protection) Act, 1972.
2. The purpose of the declaration of Eco - Sensitive Zones is to prohibit all kinds of human activities in those zones except agriculture.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q39. Consider the following statements :

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 and 3 only
(c) 2 only
(d) 1, 2 and 3

Ans: (b)

Q40. Which of the following have coral reefs?

1. Andaman and Nicobar Islands
2. Gulf of Kachchh
3. Gulf of Mannar
4. Sunderbans Select the correct answer using the code given below.

(a) 1, 2 and 3 only
(b) 2 and 4 only
(c) 1 and 3 only
(d) 1, 2, 3 and 4

Ans: (a)

Q41. In India, the problem of soil erosion is associated with which of the following?

1. Terrace cultivation

2. Deforestation
3. Tropical climate Select the correct answer using the code given below.
(a) 1 and 2 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q42. The scientific view is that the increase in global temperature should not exceed 2 °C above pre -industrial level. If the global temperature increases beyond 3 °C above the pre-industrial level, what can be its po s-sible impact/impacts on the world?
1. Terrestrial biosphere tends toward a net carbon source.
2. Widespread coral mortality will occur.
3. All the global wetlands will permanently disappear.
4. Cultivation of cereals will not be possible anywhere in the world.
Select the correct answer using the code gi v-en below.
(a) 1 only
(b) 1 and 2 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (b)

Q43. Which of the following are some i m-portant pollutants released by steel industry in India?
1. Oxides of sulphur 2. Oxides of nitrogen
3. Carbon monoxide 4. Carbon dioxide Select the correct answer using the code given b e-low.
(a) 1, 3 and 4 only
(b) 1 and 3 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4

Ans: (d)

Q44. Global climate change threatens coral reefs by
1. increasing the temperature
2. decreasing the temperature
3. increasing the pH of the oceans
4. decreasing the pH of the oceans Which of the above is/are correct?
(a) 1 and 2
(b) 2 and 3
(c) 1 and 4
(d) 2 and 4

Ans: (c)

Q45. With reference to „Forest Carbon Partnership Facility', which of the following statements is/ are correct?
1. It is a global partnership of governments, businesses, civil society and indigenous pe o-ples.
2. It provides financial aid to universities, i n-dividual scientists and institutions involved in scientific forestry research to develop eco - friendly and climate adaptation technologies for sustainable forest management.
3. It assists the countries in their 'REDD+ (Reducing Emissions from Deforestation and Forest Degradation+)' efforts by providing them with financial and technical assistance.
Select the correct an swer using the code gi v-en below. *(a)* 1 only *(b)* 2 and 3 only
(c) 1 and 3 only *(d)* 1, 2 and 3

Ans: (c)

Q46. With reference to 'dugong', a mammal found in India, which of the following statements is/an; correct?
1. It is a herbivorous marine animal.
2. It is found along the entire coast of India.
3. It is given legal protection under Schedule I of the Wildlife (Protection) Act, 1972.
Select the correct answer using the code gi v-en below. *(a)* 1 and 2 *(b)* 2 only
(c) 1 and 3 *(d)* 3 only

Ans: (c)

Q47. What are the effects that IPCC has predicted regarding global warming?
I. Earth's temperature will rise by 1 -30°C in next few decades, leading to extreme weather changes (heat waves, hurricanes and severe winters), changes in ocean currents and m a-rine life.
II. If CO2 concentration doubles, Earth's temperature may rise by 50°C.

III. The biggest glacier in the Peruvian Andes was retreating by 5 meters per year some 20 years ago; today it is shrinking by 33 meters per year.
IV. The Arctic Sea ice has thinned by 40 % in the last two decades, while Mount Everest is losing height at the rate of 1.5 meters per year.
(a) Only I
(b) I & II
(c) Only III
(d) All the above

Ans: (d)

Q48. Which statement is correct regarding the steps taken to reduce global warming?
I. Cleaning up and gasification of coal (for which technology is available) will result in lesser pollution. II. Increased use of natural gas contains only half of the carbon and no Sulphur.
III. Renewable energy sources, such as wind, solar, photo-voltaic and fuel cells, tidal, etc.
IV. Manufacture of fuel-efficient vehicles.
(a) I & II
(b) Only III
(c) Only II
(d) All the above

Ans: (d)

Q49. Which statement is correct regarding greenhouse gases? I. A greenhouse gas (GHG) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range
II. Water vapour contributes to 36 -72% of Greenhouse effect
III. Nitrous Oxide contributes to about 10% of Greenhouse effect
IV. Ozone contributes to 3-7% of Greenhouse effect
(a) I & II
(b) I, II & III
(c) I, II & IV
(d) All the above

Ans: (c)

Q50. Ozone layer in the outer atmosphere helps in: I. Reflecting radio waves and makes radio communication possible
II. Absorbing U-V radiations
III. Regulating the temperature of atmosphere
IV. Absorbing cosmic ray particles
(a) I & II
(b) Only II
(c) Only III
(d) All the above

Ans: (b)

Q51. Ozone depletion would impact the plant community in several ways. These include :
I. Increase in photosynthesis
II. Decline in water use efficiency
III. Decline in yield of plants
(a) I & II
(b) Only III
(c) II & III
(d) All the above

Ans: (c)

Q52. Nitrogen Oxide is responsible for the depletion of Ozone layer, which of following is source of Nitrogen Oxide?
I. Industrial emission
II. Fertilizers which are used in agricultural activities
III. Thermonuclear weapons
(a) I & II
(b) Only III
(c) Only II
(d) All the above

Ans: (d)

Q53. Which of the following statement is correct regarding CFC's and HCFC's?
I. These chemicals are inert, non-flammable, non- toxic, and lighter than air and can remain intact for years
II. CFCs are commonly used in Air -conditioners and the Refrigeration industry (Freon gas), aerosol propellants (in perfumes and deodorants), in the foam packaging industry (Styropor, Thermocol) and as solvents for greases and glues.
III. They contain Chlorine and Fluorine, common being CFC-11, CFC-12, CFC-22 and CFC- 13.
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q54. Which statement is correct regarding deforestation? I. The process of clearance of forest by burning or logging is called defo r-estation

II. The main reasons for deforestation are trees or derived charcoal are used as, or sold, for fuel or as a commodity, while cleared land is used as grassland for livestock, plantations of commodities, and settlements.

III. Deforested areas usually sustain extensive adverse soil erosion and regularly damage i n-to wasteland.

(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q55. Deforestation includes which of the following? I. Felling, and removal of forest litter

II. Browsing
III. Grazing and trampling of seedlings
IV. Repeated lopping Select the correct a n-swer:

(a) Only I
(b) I and III
(c) III and IV
(d) All the above

Ans: (d)

Q56. Consider the following statements I. As a greenhouse gas (GHG) methane is even more harmful than carbon dioxide

II. Methane has been included in the list of six GHGs in Kyoto Protocol.

Which of the statements given above is/are correct? *(a)* Only I *(b)* Only II
(c) Both I & II *(d)* All the above

Ans: (c)

Q57. Increased level of carbon dioxide in the atmosphere would impact the plants in many ways. These can be:

I. Decrease in photosynthetic productivity of plants
II. Proliferation of weeds
III. Increase in number of insects and other pests.

(a) I & II
(b) II only
(c) II & III
(d) All the above

Ans: (c)

Q58. Relative contributions of CO2, CH4, CFCs and N2O towards global warming are:

I. 50 %, 30 %, 10 % , and 10 % respectively
II. 60%, 20%, 14%, and 6% respectively
III. 40 %, 30%, 20% and 10% respectively
IV. None of the above

(a) Only II
(b) Only III
(c) Only I
(d) None of the above

Ans: (a)

Q59. What is denitrification?

I. It prevents the discharge of nitrates in soil, and stops ground water pollution with nutr i-ents.
II. In this solids are separated from the liquid
III. In this sewage goes through many cha m-bers and chemical processes which reduce its toxicity.

(a) I & II
(b) Only I
(c) II & III
(d) All the above

Ans: (b)

Q60. Which statement is correct regarding noise pollution?

I. The word noise comes from the Latin word nausea meaning seasickness.
II. The main source of noise is transportation system including rail noise, aircraft noise and vehicle noise
III. Sound pollution is measured in decibels

(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q61. Chlorofluorocarbons, known as ozone-depleting substances, are used:

I. In the production of plastic foams

II. In the production of tubeless tyres
III. In cleaning certain electronic components
IV. As pressurizing agents in aerosol cans
(a) Only I
(b) I, III & IV
(c) II & III
(d) All the above

Ans: (b)

Q62. Which of the following gases are r e-sponsible for acid rain in environment?
I. Carbon dioxide and nitrogen
II. Carbon monoxide and carbon dioxide
III. Ozone and carbon dioxide
IV. Nitrous oxide and Sulphur dioxide
(a) I & II
(b) Only II
(c) Only IV
(d) All the above

Ans: (c)

Q63. Spraying of DDT on crops causes pol-lution of:
I. Soil and Water
II. Air and Soil
III. Crops and Air
IV. Air and Water
(a) I & II
(b) II & III
(c) Only I
(d) All the above

Ans: (c)

Q64. Which statement is correct regarding Agro-Chemicals?
I. Agro chemicals are developed by the use of modern technology that depends on inorganic fertilizers and pesticides
II. Excess use of these fertilizers can lead to immediate harmful effect or can also be long lasting.
III. In combination with genetically enhanced varieties of crop species, agrochemicals have made significant contributions to the acco m-plishments of the "green revolution."
(a) I & II
(b) Only II
(c) Only III
(d) All the above

Ans: (d)

Q65. Which statement is correct regarding acid rain?
I. Acid rain is caused by a chemical reaction that starts when sulfur dioxide (SO2) and n i-trogen oxides
(NO2) are released into the air
II. Sulfur dioxide and nitrogen oxides are highly soluble in water and can be carried very far by the wind
III. Power plants release huge amount of su l-fur di oxide and nitrogen oxides when they burn fossil fuels, like coal, to produce ele c-tricity which can cause acid rain
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q66. Acid rain reacting with calcium forms:
I. Calcium bicarbonate
II. Calcium Nitrate
III. Calcium Sulphate
IV. Calcium Carbonate
(a) I & IV
(b) Only I
(c) Only II
(d) Only III

Ans: (b)

Q67. What among the below is/are the cause of ground water contamination?
I. Septic tanks II. Septic tanks
III. Landfills
(a) Only II
(b) I & III
(c) II & III
(d) All the above

Ans: (d)

Q68. Which statement is correct regarding Ozone Hole?
I. Ozone destruction rate is equal to the its formation rate
II. Ozone formation and destruction keep on happening
III. Ozone destruction rate is higher than its formation rate
(a) I & II
(b) II & III
(c) Only III
(d) Only I

Ans: (b)

Q69. Which statement is not true regarding Ozone?

I. Ozone is covered under Montreal Protocol.
II. Montreal protocol binds countries to adopt measures to curb ozone depleting substances.
III. HFC was used to replace ozone depleting substances.
IV. Ozone is also covered under Kyoto Protocol.

(a) I & II
(b) Only III
(c) Only IV
(d) II & III

Ans: (c)

Q70. Which of the following is not the feedback of the example in which human activity is responsible for the global climatic changes in the temperature?

I. Global warming causes snow to melt in polar regions
II. Global warming causes increased rainfall, plant growth and photosynthesis
III. Global warming causes increased CO2 release from biomass decomposition
IV. Tropical deforestation causes warming and drying so that remaining forests begin to decline

(a) I & II
(b) Only iii
(c) Only II
(d) II & IV

Ans: (c)

Q71. What is effluent waste?

I. This category of waste, contains, hazardous wastes that are harmful to human beings and hence should be stored and treated separately.
II. These wastes include a high proportion of paper, cardboards and plastics.
III. Domestic as well as industrial effluents that contaminate river water if allowed to flow unchecked.
IV. All the waste resulting from the maintenance of streets, roads, parks, and schools, paper, dry leaves, animal wastes, sludge, carcasses of small animals and slaughter house wastes.

(a) I & II
(b) Only III
(c) Only IV
(d) II & IV

Ans: (c)

Q72. What are the methods of collection of solid wastes? I. Refuse storage which may sometimes require delivery of refuse by the householder over a considerable distance

II. Door-to-door collection, where the collector enters the premises and collects the refuse and the householder is not involved in the collection process. III. Dumping in river or stream

(a) I & II
(b) Only II
(c) Only I
(d) All the above

Ans: (a)

Q73. Which statement is correct regarding radioactive waste material?

I. This arises from civil nuclear activities as well as from defense related nuclear weapon activities
II. The techniques used emphasizes on waste minimization and volume reduction
III. Nuclear waste is categorized into high, intermediate and low levels depending on the level of radioactivity in it

(a) I & III
(b) Only III
(c) Only I
(d) All the above

Ans: (d)

Q74. Which statement is correct regarding the disposal of High level waste produced from radioactive material?

I. High level waste produced from the reprocessing plant is vitrified into a glassy form, enclosed in multiple barrier vessels
II. They are stored for a temporary period of three to four decades in engineered vaults with essential observation services
III. After cooling down in these storage facilities, waste vessels will be stored for long term in deep geological repositories

(a) I & II
(b) Only II
(c) Only III
(d) All the above

Ans: (d)

Q75. Which statement is correct regarding plastic waste management?

I. Plastic was invented in 1960

II. They are the products of polymer chemi s-try produced from the by - products of petr o-leum refining

III. They are characterized into thermopla s-tics and thermosetting plastics

(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q76. Which sentence is correct regarding the manufacturing of plastic?

I. All the varieties of plastics are manufa c-tured from petrochemical based hydrocarbons

II. The raw materials and intermediate pro d-ucts used in the manufacture of Polyvinyl chloride (PVC) - Ethylene, Chlorine, Hydr o-gen chloride, Vinyl Chloride Monomer (VCM), and Ethylene Dichloride (EDC) — are known hazardous materials

III. Additives, fillers, a nd coloring pigments used in plastic goods can also exhibit non - hazardous properties

(a) I & II
(b) Only ii
(c) Only III
(d) All the above

Ans: (a)

Q77. What are the environmental issues r e-garding the manufacturing of plastics?

I. Escape of gaseous hydrocarbons, chlorine, and hydrogen chloride gas into the atmo s-phere.

II. Waste-water from the processes and wash - waters can carry pollutants.

III. Dioxins can be liberated due to mishaps in the process.

IV. Health and safety issue in the manufa c-ture of PVC is the exposure of plant operators to Vinyl Chloride Monomer (VCM)

(a) I & II
(b) II & III
(c) Only IV
(d) All the above

Ans: (d)

Q78. What are the advantages of using PVC in Water supply pipes and Industrial piping over GI pipes?

I. They are heavy and plumbing work is diffi-cult

II. Corrosion problem is eliminated and hence corrosion related contamination of water is avoided and life of the pipes increases

III. Inner surface of pipes may be made smooth to reduce friction losses, thus saving on electricity bills and conserving energy

(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (b)

Q79. What are the problems from Indi s-criminate Discarding of used Plastics?

I. They choke storm water drains, often cau s-ing overflow of storm water on roads.

II. Being non -biodegradable they remain in the soil for a very long time, thus affecting the farm economy

III. Direct transfer of molecular oxygen into water is also affected

(a) I & II
(b) Only II
(c) Only III
(d) All the above

Ans: (d)

Q80. Which statement is correct regarding the rule of the Forests issued the Recycled Plastics Manufacture and Usage Rules 1999 which was amended in 2003 under the Envi-ronment (Protection) Act, 1986?

I. No vendor shall use carry bags and co n-tainers of recycled plastics for storing carr y-ing and / or packaging of foodstuffs

II. Carry bags and Container used for packa g-ing of foodstuff shall be made of virgin pla s-tic and of natural shade or white

III. Minimum thickness of Carry bags made of virgin or recycled plastics must not be less than 20 microns

(a) I & II
(b) II & III
(c) Only III

(d) All the above

Ans: (d)

Q81. What is the main health risks associated with greater UV radiation through the atmosphere due to depletion of stratospheric ozone?

I. Increased skin cancer
II. Damage to eyes
III. Increased liver cancer
IV. Reduced immune system
(a) I & II
(b) III
(c) II & III
(d) All the above

Ans: (b)

Q82. What are the negative effect regarding bio degradable plastics?

I. The bio-degradable plastics will add to the already piling up municipal garbage
II. bio-degradable plastics are expensive and the technology for manufacture is not easily available
(a) only I
(b) only II
(c) Both I & II
(d) only III

Ans: (c)

Q83. Which of the following reasons does not help regulate global carbon dioxide concentrations?

I. Alterations in rainfall patterns
II. Storing carbon in the soil and biomass
III. Absorbing carbon dioxide for photosynthesis
IV. Releasing carbon dioxide following decay
(a) I & II
(b) II & III
(c) Only I
(d) All the above

Ans: (c)

Q84. The main function of ozone layer is:

I. Heating the stratosphere
II. Maintaining the temperature of atmosphere
III. Absorbing the ultraviolet solar radiation
(a) I & II
(b) Only II
(c) Only III
(d) All the above

Ans: (c)

Q85. Which statement is correct regarding methane?

I. Methane (CH4), also called "Marsh gas"
II. It arises from rice paddies, wetlands, enteric fermentation in cattle, burning of wood, and landfills
III. It is responsible for about 4.-9% of Greenhouse effect.
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q86. Which statement is correct regarding CFC's?

I. They are 1000 times more heat absorbent than carbon dioxide
II. They reach the atmosphere from refrigeration & air conditioning, aerosol sprays, and foam packaging industry.
III. They are responsible for 30% of greenhouse effect
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (a)

Q87. Consider the following statements regarding Ozone:

I. Ozone contributes to 3 -7% of Greenhouse effect
II. The largest net source of tropospheric ozone is influx from the stratosphere
III. Large amounts of ozone are also produced in the troposphere by photochemical reactions, the amounts increasing with high levels of air pollution.
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q88. What are the causes of deforestation?

I. Population growth and overpopulationand urbanization

II. Globalization
III. Dishonesty of government institutions
(a) Only I
(b) Only II
(c) I & II
(d) All the above

Ans: (d)

Q89. Which statement is correct regarding acid rain?
I. The term "acid rain" was coined in 1972 by Robert Angus Smith
II. Rainfall with pH less than 5.6 is called Acid rain.
III. Acid rain is caused by a chemical reaction that starts when sulfur dioxide (SO2) and nitrogen oxides
(NOX) are released into the air
(a) I & II
(b) Only II
(c) II & III
(d) All the above

Ans: (c)

Q90. Lead and cadmium compounds are added as stabilizers in PVC. Which statement is correct regarding lead and cadmium?
I. Lead and cadmium can leach out during human contact, or when disposed in land-fills
II. Lead and cadmium are known neurotoxins and nephrotoxins respectively
III. These chemicals are used in the manufacture of soft plastic items such as vinyl flooring sheets, soft toys
etc. to increase their durability
(a) I & II
(b) II & III
(c) Only III
(d) All the above

Ans: (d)

Q91. Consider the following pairs : (IAS Prelims 2016) Terms sometimes seen in the news Their origin
1. Annex—I Countries Cartagena Protocol
2. Certified Emissions Reductions Nagoya Protocol
3. Clean Development Mechanism Kyoto Protocol Which of the pairs given above is/are correctly matched?
(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3

Ans: (c)

Q92. What is 'Greenhouse Gas Protocol'? (IAS Prelims 2016)
(a) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions
(b) It is an initiative of the United Nations to offer financial incentives to developing countries to reduce greenhouse gas emissions and to adopt ecofriendly technologies
(c) It is an inter-governmental agreement ratified by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022
(d) It is one of the multilateral REDD+ initiatives hosted by the World Bank

Ans: (a)

Q93. Consider the following statements: (IAS Prelims 2016) (1) The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
(2) The Alliance includes all the member countries of the United Nations.
Which of the statements given above is/are correct? *(a)* 1 only *(b)* 2 only
(c) Both 1 and 2 *(d)* Neither 1 nor 2

Ans: (a)

Q94. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct? (IAS Prelims 2016) 1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2 °C or even 1.5 °C above pre-industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate $ 1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code gi v-en below. *(a)* 1 and 3 only *(b)* 2 only
(c) 2 and 3 only *(d)* 1, 2 and 3

Ans: (b)

Q95. 'Net metering' is sometimes seen in the news in the context of promoting the (IAS Prelims 2016) *(a)* production and use of s o-lar energy by the households/ consumers
(b) use of piped natural gas in the kitchens of households *(c)* installation of CNG kits in motor-cars
(d) installation of water meters in urban households

Ans: (a)

Q96. On which of the following can you find the Bureau of Energy Efficiency Star L a-bel? (IAS Prelims 2016) 1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps Select the cor-rect answer using the code given below. *(a)* 1 and 2 only *(b)* 3 only
(c) 2 and 3 only *(d)* 1, 2 and 3

Ans: (d)

Q97. In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index? (IAS Prelims 2016) 1. Carbon dioxide 2. Carbon monoxide
3. Nitrogen dioxide 4. Sulfur dioxide
5. Methane Select the correct answer using the code given below. *(a)* 1, 2 and 3 only
(b) 2, 3 and 4 only
(c) 1, 4 and 5 only
(d) 1, 2, 3, 4 and 5

Ans: (b)

Q98. Which of the following statements r e-garding „Green Climate Fund' is/are cor-rect? (IAS Prelims 2016)
1. It is intended to assist the developing cou n-tries in adaptation and mitigation practices to counter climate change.
2. It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank.
Select the correct answer using the code gi v-en below. *(a)* 1 only *(b)* 2 only
(c) Both 1 and 2 *(d)* Neither 1 nor 2

Ans: (a)

Calamity Management

LEVEL-1

Q1. A place where an earthquake originates is called _____?

(a) Focus
(b) Fault line
(c) Epicenter
(d) S- Wave

Ans: (a)

Q2. As the magnitude of natural disasters decreases their frequency of occu r-rence_____?

(a) Increases
(b) Decreases
(c) Remains the same
(d) Varies with time

Ans: (b)

Q3. The destructive powers of Tsunami r e-sult mainly from their___?

(a) Incredible height
(b) Unpredictability
(c) Cold water
(d) Momentum and long wavelength

Ans: (d)

Q4. Earthquakes occur when there is a su d-den release of stored up energy in Earth's

(a) inner core
(b) outer core
(c) upper mantle
(d) lower crust

Ans: (c)

Q5. Tremors that have occurred in Earth's crust are known as

(a) Earthquakes
(b) Volcanic eruptions
(c) Bed eruptions
(d) Volcano-Earth Quake

Ans: (a)

Q6. Instrument used to measure earthquake is known as

(a) quake meter
(b) quake graph
(c) seismograph
(d) typanic graph

Ans: (c)

Q7. Another name for Earthquakes is

(a) nektons
(b) temblors
(c) blusters
(d) flickers

Ans: (b)

Q8. After earthquake has taken place, it is followed by

(a) pro-shocks
(b) pre-shock
(c) aftershocks
(d) mini-maximal shocks

Ans: (c)

Q9. An example of composite volcanoes is

(a) Mount Everest
(b) Puy de Dome
(c) Mauna Loa
(d) Mount Merapi

Ans: (d)

Q10. During eruption, volcanic material is

(a) blown to some meters
(b) blown to many kilometers
(c) blown to some inches
(d) blown to some feet

Ans: (b)

Q11. Divergence of plates allows magma from mantle to reach surface as

(a) ice
(b) rocks
(c) lava
(d) stones

Ans: (c)

Q12. A reference to process by which mat e-rials such as magma and gases from inside Earth are forced onto Earth's surface is

(a) Eruption
(b) Lava
(c) Volcanism
(d) Earthquake

Ans: (c)

Q13. When volcanoes ejects basic lava, eruption is mainly

(a) loud
(b) violent
(c) quite
(d) hard

Ans: (c)

Q14. Tropical cyclones are intense low pressure areas confined to the area lying between?
(a) 30 degree north and 30 degree south
(b) 50 degree north and 50 degree south
(c) 50 degree north and 30 degree south
(d) 50 degree south and 30 degree north
Ans: (a)

Q15. Which of these is/are flood prevention and mitigation strategy?
(I) Construction flood prevention embracement's
(II) Depopulating flood plains
(III) Afforestation
(IV) Decongesting the river channels Select the following options below
(a) I and II only
(b) I, II and III
(c) II, III and IV
(d) I, II , III and IV
Ans: (d)

Q16. The instrument that measures the wind speed in a cyclone is?
(a) Anemometer
(b) Barometer
(c) Thermometer
(d) Ammeter
Ans: (a)

Q17. Which one of the following places is unlikely to be affected by a cyclone?
(a) Chennai
(b) Mangalore
(c) Amritsar
(d) Puri
Ans: (c)

Q18. Which watering method is NOT the best way to conserve water?
(a) by hand, manual
(b) overhead sprinklers
(c) drip system
(d) soaker hose
Ans: (b)

Q19. Droughts are formed by which of the following methods?
(a) lack of precipitation
(b) Temperature variations
(c) Atmospheric pressure
(d) All of the above
Ans: (d)

Q20. Which of the following is the disaster management plan?
(a) Constructing cyclone shelters
(b) Providing loans
(c) Proving schools for children
(d) Providing medical facility
Ans: (a)

Q21. The term Tsunami is coined from
(a) Chinese term
(b) Japanese term
(c) Hawaiian term
(d) German Term
Ans: (a)

Q22. National institute for Disaster management is located at?
(a) Bangalore
(b) New Delhi
(c) Pune
(d) Hyderabad
Ans: (b)

Q23. Landslides occur because of?
(a) Intensity of rainfall
(b) Steep sloped
(c) Deforestation leading to soil erosion
(d) All of the above
Ans: (b)

Q24. Out of the total 35 state/ union territories of India, how many are disaster prone?
(a) 22
(b) 24
(c) 25
(d) 23
Ans: (d)

Q25. Bhopal Gas Disaster occurred with the release of which of the following gas.
(a) Methyl-isocynate
(b) Methyl –isocynide
(c) Sulphur dioxide
(d) Nitrous oxide
Ans: (c)

Q26. Which of the following equipment is used for the treatment of oil spills?
(i) Booms (ii) Shovels
(iii) Vacuums (iv) Boilers Which of the following is/are correct?
(a) (i) and (ii)
(b) (i), (ii) and (iii)

(c) (iv), (ii) and (i)
(d) (ii) and (iv)

Ans: (a)

Q27. Which natural hazard has resulted in the greatest monetary losses in a single event from the period of life listed?
(a) Earthquake
(b) Hurricane
(c) Fire
(d) Flood

Ans: (b)

Q28. The largest wave during a Tsunami event is _____?
(a) The first
(b) The third
(c) The fifth
(d) Unpredictable, it could be any of them

Ans: (b)

Q29. In an open ocean Tsunami can travel _____miles per hour with the per iods up to____ minutes?
(a) 50; 20
(b) 50;60
(c) 485;20
(d) 485;60

Ans: (d)

Q30. Which of the following events produces biggest tsunami?
(a) Earthquake
(b) Underwater landslides
(c) Hurricanes
(d) Impacts of asteroids and comets

Ans: (d)

Q31. Powerful tsunamis are most frequently produced by?
(a) Volcanoes
(b) Underwater landslides
(c) Earthquake
(d) Impact of comets

Ans: (d)

Q32. Which of the following is the location of super volcano?
(a) Yellowstone National Park
(b) Mt. Rainier
(c) Iceland
(d) Mt. Kilimanjaro

Ans: (c)

Q33. The last major super volcano eruption 75000 years ago killed about which percent of the world's human?
(a) 0%
(b) 1%
(c) 5%
(d) 60%

Ans: (a)

Q34. Which was the deadliest hurricane in US history?
(a) Katrina
(b) Gavelston hurricane of 1990
(c) Andrew
(d) Camille

Ans: (d)

Q35. Which European city was almost entirely destroyed by combination of earthquake/ fire/ tsunami in 1755?
(a) Lisbon
(b) Rome
(c) Barcelona
(d) Athens

Ans: (b)

Q36. In 1908 asteroid exploded near the earth's surface with a force of a 15 megaton nuclear weapon. Where did it strike?
(a) New Mexico
(b) Siberia
(c) South pacific
(d) Pakistan

Ans: (d)

Q37. Not counting pandemics; the two deadliest natural disasters recorded on record were both:
(a) Flooding of the Yellow river of China
(b) Monsoons in India
(c) Hurricanes in Bangladesh
(d) Earthquakes in Pakistan

Ans: (b)

Q38. Tremendous damage along with huge destruction of build ings can take place at a scale of
(a) 5
(b) 6
(c) 7
(d) 8-10

Ans: (a)

Q39. Other than boundaries of crustal plates, earthquakes may occur within areas with

(a) frequent civil activities
(b) frequent explosive activities
(c) frequent deforestation activities
(d) frequent volcanic activities

Ans: (d)

Q40. In some eruptions, mudflows are forced over the

(a) Earth's mantle
(b) Ocean bed
(c) Earth's surface
(d) Earth's core

Ans: (d)

Q41. Magma which is forced onto Earth's surface is known as

(a) Vent
(b) Cone
(c) Lava
(d) Magma Chamber

Ans: (c)

Q42. Composite volcanoes are made up of alternate layers of

(a) ash and cinder only
(b) dense lava and ash
(c) viscous lava, ash and cinder
(d) pyroclastic lava, ash and cinder

Ans: (c)

Q43. Movement of crustal plates result in formation of

(a) a huge island
(b) small volcanic islands
(c) a small island
(d) huge volcanic islands

Ans: (c)

Q44. When volcanoes eject basic lava, eruption is mainly?

(a) Loud
(b) Violent
(c) Silent
(d) Hard

Ans: (b)

Q45. Consider the following statements:

(I) natural hazards are the elements of circumstances in the natural environment that have the potential to cause harm to people and property or both

(II) natural disasters are relatively sudden and cause large scale, wide spared death and loss of property and disturbance to social systems and life over, which people have more to little or no control.

Which of the following statements is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 & 2
(d) Neither 1 or 2

Ans: (c)

Q46. The Indian Tsunami Early Warning centre is located in which of the following places?

(a) Chennai
(b) Kochi
(c) Hyderabad
(d) Goa

Ans: (c)

Q47. _____ helps us announce a cyclone alert

(a) Satellite
(b) Stars
(c) Sun
(d) moon

Ans: (c)

Q48. Which is the better watering regime under general conditions?

(a) daily, 10 minutes
(b) every other day, 20 minutes
(c) weekly, 20 minutes
(d) weekly, one or two

Ans: (a)

Q49. Gray water is recommended for watering gardens. What is it?

(a) dirty rain water
(b) leftover household water such as from dishes
(c) un-chlorinated water
(d) rainwater from gutters

Ans: (d)

Q50. Which of the following activities is covered by disaster management before, during and after disaster?

(a) Reconstruction and Rehabilitation
(b) Mitigation
(c) Emergency Response
(d) All of the above

Ans: (b)

Q51. Landslides occur because of?

(a) Intensity of rainfall
(b) Steep sloped
(c) Deforestation leading to soil erosion
(d) All of the above

Ans: (d)

LEVEL-2

Q1. Ministry for water resources, river d e-velopment and Ganga rejuvenation has a n-nounced to celebrate the birth anniversary of Dr. Bhim Rao Ambedkar held on 14th April as which day?

(a) Health Day
(b) Water Day
(c) Conservation Day
(d) Food Day

Ans: (b)

Q2. Which country issued its first Green Bonds with a record sale of USD 7.5 billion in January, 2017?

(a) Britain
(b) France
(c) Germany
(d) Mauritius

Ans: (b)

Q3. The National Physical Laboratory (NPL)-CSIR has dedicated the first pristine air-quality monitoring station to the Nation at:

(a) Palampur
(b) Srinagar
(c) Nanital
(d) Shimla

Ans: (a)

Q4. Considering climate change, melting of ice sheets and glaciers causes the

(a) destruction of infrastructure
(b) endangering of species
(c) desertification
(d) destruction of human settlements

Ans: (b)

Q5. Considering climate change, increased global temperatures causes the

(a) desertification
(b) destruction of human settlements
(c) destruction of infrastructure
(d) endangering of species

Ans: (a)

Q6. Considering climate change, rise in w a-ter level in oceans and seas due to melted ice sheets and glaciers causes

(a) desertification
(b) destruction of human settlements
(c) destruction of infrastructure
(d) endangering of species

Ans: (b)

Q7. Long period of time without water is classified as

(a) flood
(b) drought
(c) desertification
(d) endangering

Ans: (c)

Q8. Human activities that causes climate change on Earth includes

(a) burning of forests
(b) agricultural activities
(c) use of aerosol cans
(d) all of above

Ans: (d)

Q9. Which of the following contributes the maximum to the greenhouse effect?

(a) Carbon dioxide
(b) Water vapour
(c) Methane
(d) Nitrous oxide

Ans: (b)

Q10. What was Montreal Protocol co n-cerned with?

(a) Checking ozone layer depletion
(b) Checking Global warming
(c) Protecting Biodiversity
(d) Increasing forest cover

Ans: (a)

Q11. Consider the following statements

(i) Ramsar Convention is an intergovernme n-tal treaty to maintain the ecological character of Wetlands of international importance.
(ii) 26 sites in India is covered under Ramsar Convention for wildlife conservation.
Which of the following statement *(s)* is\are true?

(a) i)
(b) ii)
(c) both i) and ii)
(d) None

Ans: (c)

Q12. Earth's temperatures are stable be-cause we are surrounded by _____

which allows the right amount of sunlight in to warm the Earth.

(a) a cloud layer
(b) an atmosphere
(c) gravity
(d) water

Ans: (b)

Q13. This layer keeps us "not too hot in the summer" and "not too cold in the winter." Scientists call this the _____ effect.

(a) greenhouse effect
(b) seasonal effect
(c) ocean effect
(d) lake effect

Ans: (a)

Q14. Certain gases in the atmosphere – water vapor, carbon dioxide, methane and n itrous oxide – help maintain the Earth's temperatures and climate. These are called: _____.

(a) ozone gases
(b) solar gases
(c) greenhouse gases
(d) stomach gases

Ans: (c)

Q15. The solar energy that warms the Earth includes visible light, infrared and _____ coming from the sun.

(a) gamma rays
(b) ultraviolet radiation
(c) microwaves
(d) sunspots

Ans: (b)

Q16. The solar radiation that bounces off the Earth back toward the atmosphere is mostly _____ with a longer wavelength

(a) gamma radiation
(b) x-ray radiation
(c) nuclear radiation
(d) infrared radiation

Ans: (d)

Q17. The layer of the atmosphere closest to Earth is called the: _____.

(a) troposphere
(b) stratosphere
(c) exosphere
(d) mesosphere

Ans: (a)

Q18. How are humans making greenhouse gases of our own?

(a) burning fossil fuels in our cars
(b) burning forests
(c) with large-scale agriculture
(d) all of these

Ans: (d)

Q19. Too many greenhouse gasses in the atmosphere may block heat from escaping into space and trap too much heat next to the Earth's surface causing: _____.

(a) another ice age
(b) global warming
(c) earthquakes
(d) volcanic eruptions II. Under the Kyoto Protocol, the accelerated phase out of Hydrochlorofluorcarbons (HCFCs) is underway with a aim to complete phase out by 2030. III. Montreal Protocol came into force in 1989 and has been ratified by 197 parties making it universally ratified protocol in UN history. Select the correct a nswer from the following codes:

Ans: (b)

Changing Environment

LEVEL-1

Q1. Consider the following statements.

I. Recently the Uttarakhand High Court a c-corded the status of living human entities to the two most sacred rivers of India the Ganga and Yamuna.

II. In this context the court cited the example of the river Whanganui of Egypt.

Select the correct answer from the following codes:

(a) Only II
(b) Only I
(c) Both I and II
(d) Neither I nor II

Ans: (b)

Q2. Which of the following is/are correct about India's recently approved ratification of the tSecond Commitment Period of the Kyoto Protocol.

I. The protocol is related with carbon emi s-sion trading.

II. UNFCCC was negotiated in Rio de Janeiro in 1995

III. At present, there are 193 parties to the Protocol.

Select the correct answer from the following codes:

(a) Only III
(b) Only II & III
(c) Only I
(d) None of the above

Ans: (d)

Q3. Which of the following is/are correct about the Indian Shad?

I. In January 2017 the West Bengal Govt. Gave legal protection to Hilsa Fish to stab i-lize its declining population.

II. Hilsa or the Indian Shad is the first fish va-riety in India to get legal protection.

III. It is the national fish of Pakistan.

Select the correct answer from the following codes:

(a) Only I & II
(b) Only III
(c) Only II & III
(d) All of the above

Ans: (a)

Q4. India has recently launched Stage II of HCFC Phase Out Management Plan. In this context consider the following statements.

I. It aims to phase out use of Hydrochlor o-fluorocarbons
(HCFCs), harmful ozone -depleting substan c-es (ODS)

Ans: (d)

Q5. Which of the following is/are related to environment?

I. Ramsar Convention
II. GLOBE
III. UNFCC Select the correct answer from the following codes:

(a) Only I
(b) Only III
(c) Only I and III
(d) I, II and III

Ans: (a)

Q6. Recently Assam government has taken an initiative to develop Majuli as India's first carbon neutral district.

In this context consider the following state-ments.

I. Majuli is the biggest river island in the world.

II. Assam government has launched Sustai n-able Action for Climate Resilient Develo p-ment in Majuli.

III. The fluvial riverine island is formed by the Manas river system and world's largest mid river delta system.

Select the correct answer from the following codes:

(a) Only III
(b) Only II & III
(c) Only I and II
(d) All of the above

Ans: (c)

Q7. Recently the Southern Bench of the N a-tional Green Tribunal (NGT) suspended the Environmental Clearance
(EC) granted to the India -based Neutrino Ob-servatory
(INO).

In this context consider the following stat e-ments:
I. The proposed underground laboratory will be studying the properties of the neutrino, which would be accompanied by research r e-garding black matter and double beta decay.
II. It would be modelled after the existing neutrino labs in Japan, Italy and Canada.

Ans: (d)

Q8. Recently Wildlife Crime Control B u-reau (WCCB)' is in news for fight against wild life crime.
In this context consider the following stat e-ments:
I. Operation Thunderbird is code -name of INTERPOL's multi-national and multi -species enforcement operation for wildlife protection.
II. Operation Save Kurma was species speci f-ic operation on turtles.
III. WCCB was established in June 2007 by amending the Wildlife (Protection) Act (WLPA), 1973, a special Act to protect the wildlife and fauna in the country.
Select the correct answer from the following codes:
(a) Only I & II
(b) Only I, II & III
(c) Only III
(d) None of the above

Ans: (a)

Q9. Recently Seemai Karuvelam (prosopis juliflora) trees are in news.
In this context consider the following stat e-ments:
I. The Madurai bench of the Madras High Court has ordered Tamil Nadu government to enact a law with prohibitory and penal claus-es to eradicate Seemai Karuvelam.
II. Seemai Karuvelam tree species are native to West Africa. It was brought to Tamil Nadu in 1960s as medicinal plants.
III. It is an invasive species of tree harmful to the environment as it sucks lot of water ult i-mately affect the environment and agricultu r-al activities.
Select the correct answer from the following codes:
(a) Only III
(b) Only II & III
(c) Only I & III
(d) All of the above

Ans: (c)

Q10. Hope Island in Andhra Pradesh is a major concern.
In this context consider the following stat e-ments:
I. Olive Ridleys turtles are recognized as Vulnerable by the IUCN Red list.
II. In India, it is protected under the Wildlife (Protection)
Act.
III. Hope Island in Andhra Pradesh has b e-come graveyard for Olive Ridleys turtles Se-lect the correct answer from the following codes:
(a) Only III
(b) Only I
(c) All of the above
(d) None of the above

Ans: (c)

Q11. Consider the following statements r e-garding Ken -Betwa inter-linking of rivers (ILR) project.
I. The National Board for Wildlife (NBWL) has given its clearance for the Ken -Betwa in-ter-linking of rivers
(ILR) project,
II. The project aims to transfer surplus water from the Ken River to the Betwa basin through concrete canal to irrigate India's worst drought-prone Bundelkhand region.
III. Nearly 8,650 hectares of forest land i n-cluding part of Panna National Park in Madhya Pradesh will be submerged due to implementation of this project.
IV. Nearly 8,650 hectares of forest land i n-cluding part of Panna National Park in Uttar Pradesh will be submerged due to impleme n-tation of this project.
Select the correct answer from the following codes:
(a) Only I, II & IV
(b) Only III & IV
(c) Only I

(d) Only II. III & IV

Ans: (a)

Q12. The centre has launched the first ever across-the-river survey in the Ganga to determine the population of aquatic life, especially that of the endangered Gangetic dolphin.

Consider the following statements regarding the Gangetic dolphin:

I. The Ganges River dolphins are also known as "susu" and inhabits the river systems of Nepal, India and Bangladesh.

II. The species is found exclusively in lake habitat.

III. One of the main threats to the species is the loss of habitat due in large part to the creation of dams and irrigation projects.

Which of the above statement (s) is/are correct?

(a) Only I and II
(b) Only II and III
(c) Only I and III
(d) Only I, II and III

Ans: (c)

Q13. As the smuggling networks strengthen, India continues to bear the disgrace of being the source of the illegal trade and export of tortoises and freshwater turtles (TFT). Consider the following statements in this regard:

I. 28 species of tortoises and freshwater turtles are found in India.

II. Turtles act as scavengers of cleaning up water bodies and generally are used as indicators of river health.

III. The National Mission for Clean Ganga envisages breeding and release of turtles to clean wetlands.

Which of the following statements is true?

(a) I and III
(b) II and III
(c) I and II
(d) I, II and III

Ans: (d)

Q14. Recently, one of the affiliated organisations of Union Environment Ministry of India has revealed the state regarding level of pollution in Indian cities. Consider the following statements regarding this:

I. Nearly one third of Indian cities have breached annual pollution limits mandated by the Central Pollution Control Board (CPCB) between 2011 and 2015.

II. CPCB data show that 94 cities spanning states from Andhra Pradesh to Jammu and Kashmir and Assam to Gujarat were guilty of breaching the annual, particulate matter limit of 60 micro-gram per cubic metre.

III. The cities like Delhi, Mumbai and Pune measure PM 2.5 levels, most lack the sensors required to gauge the presence of these minute particles that are considered more toxic than the more commonly measured PM 10.

Which of the following statement (s) is/are correct?

(a) Only I
(b) I and II
(c) II and III
(d) All of the above

Ans: (d)

Q15. Recently the first vertical garden of India has been setup at Bengaluru. In this context consider the following statements.

I. It will act as a sound proofing barrier and control pollution.

II. The first vertical gardens were setup in USA

III. The garden has an automatic drip irrigation system to water the plants on daily basis

Which of the following statement(s) is/are correct?

(a) Only I and III
(b) Only II
(c) Only I and II
(d) All of the above

Ans: (a)

Q16. The National Green Tribunal has suspended the Environmental Clearance (EC) granted to the India -based Neutrino Observatory (INO). Consider the following statements regarding the Environment Clearance in India:

I. The guideline is that if any project falls within 5km from an inter -State boundary or

within a notified national park or a sanctuary has to be considered a category 'A' project.
II. The Tribunal found that the Mathiketan Shola National Park was just about 4.9 km from the proposed project site making it a category 'A' project.
III. For category 'B' project, an Environmental Impact Assessment is necessary.
Which of the above statements is correct?
(a) I and III
(b) II and I
(c) III and II
(d) I, II and III

Ans: (b)

Q17. A recent report states that West Bengal has the highest number of arsenic-affected people in the country. Consider the following statements regarding the arsenic level in drinking water in India.
I. The WHO's guideline for drinking water quality has given a permissible limit of arsenic in groundwater to be about 0.01mg per litre.
II. In India, the permissible limit of arsenic, in drinking water has been increased from .01mg per litre to .05mg per litre.
Which of the following statement *(s)* is/are correct?
(a) Only I
(b) Only II
(c) Both I and II
(d) Neither I nor II

Ans: (a)

Q18. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct?
1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2 °C or even 1.5 °C above pre-industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate $ 1000 billion a year from 2020 to help developing countries to cope with climate change.
Select the correct answer using the code given below.
(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

LEVEL-2

Q1. Which of the following can be achieved through environment management?
(a) Intra-generation Equity
(b) Environmental Governance
(c) Conservation of critical environment resources
(d) all the above

Ans: (d)

Q2. Which of the following implemented the National Rural Drinking Water Pr o-gramme?
(a) Department of Drinking Water and Sanitation
(b) Department of Drinking Water Supply
(c) National Water Development Agency
(d) None of the above.

Ans: (a)

Q3. Amrit, a low -cost arsenic filter using nano-filtration technology, has been deve l-oped by
(a) Indian Institute of Technology-Madras
(b) Indian Institute of Technology-Delhi
(c) Indian Institute of Science-Bangalore
(d) Indian Institute of Technology-Bombay

Ans: (a)

Q4. Which of the following activities has been banned in Ganga?
(a) boating
(b) fishing
(c) camping
(d) both a and b

Ans: (c)

Q5. Recently, which of the following states has proposed to introduce curriculum on water conservation?
(a) Madhya Pradesh
(b) Rajasthan
(c) Maharashtra
(d) Tamil Nadu

Ans: (b)

Q6. Thermal power plants in India have been warned for releasing which of the fo l-lowing pollutants?
(a) Sulphur Dioxide
(b) Nitrogen Oxide
(c) Mercury
(d) all the above

Ans: (d)

Q7. Which of the companies has made an agreement with specialty chemicals maker Evonik Industries for setting up an env i-ronmental-friendly project in Gujarat?
(a) Gujarat Alkalies and Chemicals Limited
(b) Gujarat Organics Limited
(c) Bodal Chemicals Ltd.
(d) BASF India Limited

Ans: (a)

Q8. Recent Supreme Court ruling banned which of the following type of vehicles?
(a) BS-IV vehicles
(b) BS-III vehicles
(c) diesel vehicles
(d) petrol vehicles

Ans: (b)

Q9. How much green cess has been pr o-posed by the Environment Pollution (Pr e-vention and Control) Authority (EPCA) for the National Capital Region (NCR) on diesel vehicles?
(a) 20-22%
(b) 15-20%
(c) 10-15%
(d) 20-25%

Ans: (a)

Q10. Which of the following apps has been launched for monitoring of pollution levels in industrial regions.
(a) Drishti
(b) Watawaran
(c) Shristi
(d) None of the above

Ans: (a)

Q11. The Delta Coalition is a collaborative delta policy of how many countries?
(a) 14
(b) 20
(c) 17

Ans: (d)

Q12. Which of the following provides fina n-cial aid for reducing carbon emission?
(a) World Bank
(b) United Nations
(c) World Health Organization.
(d) None

Ans: (a)

Q13. Which of the following contribute to soil management?
(a) organic farming
(b) bio-fertilizer
(c) intensive farming
(d) both a and b

Ans: (d)

Q14. Recently, the use of which of the fo l-lowing has been proposed to monitor tigers?
(a) helicopters
(b) infrared camera
(c) drones
(d) radio signal

Ans: (c)

Q15. Problem of solid waste can be reduced through
(a) Timber use
(b) lesser pollution
(c) population control
(d) recycling

Ans: (d)

Q16. Which of the following are natural fi l-ters which are used for treatment of sewage waste?
(a) Sand
(b) Gravel
(c) Plants
(d) All the above

Ans: (d)

Q17. What is the aim of 'Water4crops' pro-ject?
(a) Use less water for crops
(b) More irrigation facilities
(c) Bio-treated wastewater reuse
(d) Drip and Sprinkle Irrigation

Ans: (c)

Q18. Industrial pollution can be reduced through
(a) eco-labeling
(b) Pollution charge
(c) government subsidy
(d) both b and c

Ans: (d)

Q19. Ganga pollution can be controlled through
(a) sewage treatment
(b) rafting
(c) camping

Ans: (a)

Q20. Inland water quality -monitoring ne t-work is operated under
(a) Global Environment Monitoring System (GEMS)
(b) Monitoring of Indian National Aquatic Resources System (MINARS)
(c) Yamuna Action Plan (YAP)
(d) all the above

Ans: (d)

Q21. Which of the following pollutants can be removed by
(a) organic particles
(b) debris
(c) grit
(d) all the above

Ans: (d)

Q22. What percent of total profitability need to be spent by companies in India to-wards environmental corporate social re-sponsibility?
(a) 5%
(b) 1%
(c) 3%
(d) 2%

Ans: (d)

Q23. Which of the following Indian banks has invested in the Carbon Disclosure Pr o-ject?
(a) State Bank of India
(b) HDFC Bank
(c) Punjab National Bank
(d) Central Bank

Ans: (a)

Q24. Which of the following is a pollution monitoring app?
(a) RajVayu
(b) KendraVayu
(c) ShudhVayu
(d) both b and c

Ans: (a)

Q25. Amended Form 22 of pollution control applies to
(a) CNG vehicles
(b) electric vehicles
(c) diesel vehicles
(d) all the above

Ans: (d)

Q26. Which type of pollution can be co n-trolled by super critical and ultra -super critical (USC) technologies?

(a) water pollution
(b) co2 emission
(c) radioactive emission
(d) None

Ans: (b)

Q27. Which of the following plant is consi d-ered highly inflammable and responsible for forest fire?

(a) Chir pine
(b) oak
(c) fir
(d) teak

Ans: (a)

Environment Administration

LEVEL-1

Q1. Read the following statements regar d-ing the launch of Roll-on Roll-Off (RORO) Service.

i. It was launched in Delhi region.
ii. It aims at controlling water pollution.
iii. It states that heavy commercial vehicles passing through Delhi will be loaded on flat railway wagons at railway terminals.
Choose the correct option.
(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) i and iii

Ans: (d)

Q2. Read the following statements regar d-ing the Central Pollution Control Board.

i. It is implementing the Air (Prevention and Control of Pollution) Act 1981 to restore air quality.
ii. It is a statutory organisation under the Ministry of Environme n t, Fores t and Clima t e Change (MoEF&CC).
iii. It was established in 1974 under the Water (Prevention and Control of pollution) Act, 1974.
Choose the correct option.
(a) i, ii and iii
(b) i and iii
(c) ii and iii
(d) i and iii

Ans: (a)

Q3. Read the following statements regar d-ing the National Air Quality Monitoring Programme (NAMP).

i. Four air pollutants viz., Sulphur Dioxide (SO2), Oxides of Nitrogen as NO2, Suspen d-ed Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM/ PM10) have been identified.
ii. The monitoring of meteorological param e-ters such as wind speed and wind direction, relative humidity (RH) and temperature were also integrated with the monitoring of air quality.
Choose the correct option.
(a) only i
(b) both i and ii
(c) only ii
(d) None

Ans: (b)

Q4. Read the following statements regar d-ing National Air Quality Index.

i. It is a colour -coded national air -quality i n-dex.
ii. It was launched by the Minister for Env i-ronment, Forests & Climate Change.
iii. It was launched under the Swachh Bharat Mission.
Choose the correct option.
(a) i and iii
(b) ii and iii
(c) i, ii and iii
(d) i and ii

Ans: (c)

Q5. Read the following statements regar d-ing the Graded Response To Air Pollution.

i. A graded response highlights the actions required to be taken as and when the conce n-tration of pollutants reaches a certain level.
ii. The measures that are to be enforced under the plan include strict ban on garbage bu rn-ing, closing brick kilns, mechanised and e n-forcing ban on fire-crackers.
iii. It has no provisions for odd -even car r a-tioning scheme.
Choose the correct option.
(a) i and ii
(b) ii and iii
(c) i and iii
(d) i, ii and iii

Ans: (d)

Q6. Read the following statements regar d-ing the National Electric Mobility Mission Plan.

i. It aims at achieving national fuel security by promoting hybrid and electric vehicles.
ii. It promotes the use of conventional veh i-cles to reduce liquid fuel consumption.
iii. It targets at achieving 6 -7 million sales of CNG vehicles by 2020.
Choose the correct option.
(a) i and iii
(b) ii and iii
(c) i and ii

(d) i, ii and iii

Ans: (c)

Q7. Read the following statements regarding using ethanol as fuel.

i. Ethanol is can be produced from sugarcane, maize, and wheat

ii. Ethanol Blended Petrol (EBP) programme was launched in January 2009.

iii. Ethanol can be only be blended with diesel.

Choose the correct option.

(a) i and iii
(b) ii and iii
(c) i and ii
(d) only i

Ans: (d)

Q8. Read the following statements regarding RajVayu app.

i. It was launched in Madhya Pradesh.

ii. It shares information about air quality index.

iii. It was launched on the World Environment Day.

Choose the correct option.

(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) only ii

Ans: (c)

Q9. Read the following statements regarding amendment of Form 22 related to noise pollution.

i. It was amended under the Central Motor Vehicles Act, 1990.

ii. It will include pollution standards, safety standards of component quality and road - worthiness certificate for all vehicles.

iii. The Union Ministry of Road Transport & Highways plans to introduce five star ratings to vehicles based on their emission and noise pollution standards.

Choose the correct option.

(a) i, ii and iii
(b) ii and iii
(c) i and ii
(d) i and iii

Ans: (b)

Q10. Read the following statements regarding the recent discovery of oil degrading bacteria.

i. It cannot degrade hydrocarbons.

ii. It has been discovered in Kochi, Kerala.

iii. This bacteria does not have enzyme.

Choose the correct option.

(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) i and iii

Ans: (a)

Q11. Read the following statements regarding recycling of wastewater.

i. It will increase water pollution.

ii. Recycled wastewater cannot be used in agriculture.

iii. It can also be a rich source of nutrients, minerals and energy.

Choose the correct option.

(a) only iii
(b) i and iii
(c) i and iii
(d) i, ii and iii

Ans: (a)

Q12. Read the following statements regarding the World Bank's Climate Change Action Plan.

i. It intends to control climate change by 2022.

ii. It helps developing countries to deliver their targets set in the national climate plans submitted for the historic climate agreement reached at COP21 in Paris in December 2015.

iii. It aims at integrating climate into urban planning through the Global Platform for Sustainable Cities.

Choose the correct option.

(a) i and iii
(b) i and ii
(c) ii and iii
(d) i, ii and iii

Ans: (c)

Q13. Read the following statements regarding suggestions for forest fire prevention.

i. Planting narrow-leaf trees.

ii. Creating ponds and other water harvesting structures within the forest.

iii. Using corporate social responsibility funds for creating awareness campaigns on forest fires.
Choose the correct option.
(a) i, ii and iii
(b) ii and iii
(c) i and ii
(d) i and iii

Ans: (b)

Q14. Read the following statements regarding rules on waste management in India.
i. Source segregation of waste has been made compulsory to channelize the waste.
ii. Special Economic Zone need to leave at least 10% of the total area for recovery and recycling facility.
iii. Bio -degradable waste should be processed, treated and disposed through composting or bio-methanation.
Choose the correct option.
(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) i and iii

Ans: (d)

Q15. Read the following statements regarding National Solid Waste Association of India.
i. It is a member of the International Solid Waste Association (ISWA).
ii. It develops standards in solid waste management.
iii. It expertise in the field of Solid Waste Management at the national level.
Choose the correct option.
(a) i ad iii
(b) ii and iii
(c) i and ii
(d) i, ii and iii

Ans: (c)

Q16. Read the following statements on United Nations Convention to Combat Desertification.
i. It has proposed Science –Policy Interface (SPI) to facilitate a two -way science –policy dialogue and ensure the delivery of policy -relevant information.
ii. The SPI is composed of 25 members and three observers.
Choose the correct option.
(a) i and ii
(b) only i
(c) only ii
(d) None of the above

Ans: (b)

Q17. Read the following statements regarding an Eco-Sensitive Zone (ESZ).
i. An ESZ has been proposed at Sanjay Gandhi National Park in Mumbai.
ii. ESZ acts as a buffer for further protection around Protected Areas (PAs) such as National Parks and Wildlife sanctuaries.
iii. ESZ is notified under Section 3 of the Environment (Management) Act, 1986 by the Union Ministry of Environment and Forest.
Choose the correct option.
(a) i, ii and iii
(b) ii and iii
(c) i and ii
(d) i and iii

Ans: (c)

Q18. Read the following statements regarding Access and Benefit Sharing (ABS) Mechanism.
i. It is used for biodiversity conservation.
ii. It involves sharing a part of profit earned from natural resources.
iii. It involves paying tax to government for using natural resource.
Choose the correct option.
(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) i and iii

Ans: (a)

Q19. Which of the following activities is/are permitted in the Eco Sensitive Zones (ESZ)?
1. Felling of trees
2. Establishment of Hotels and Resorts
3. Rain water harvesting Choose the correct alternative using the codes given below.
(a) 1 and 2 only
(b) 3 only
(c) 2 only
(d) 1, 2 and 3

Ans: (b)

Q20. Which of the following are correct

i. India has only 2.4 percent of the land area, and accounts for 7-8 per cent of the recorded species of the world

ii. In terms of species richness, India ranks seventh in mammals, ninth in birds and fifth in reptiles.

(a) 1
(b) 2
(c) Both
(d) None

Ans: (c)

Q21. National Action Plan on Climate Change, 2008 (NAPCC) includes which of the following programmes:

(i) National solar mission.
(ii) National mission for enhanced energy efficiency.
(iii) National mission for sustainable habitat.
Choose the correct option.

(a) i and ii
(b) ii and iii
(c) all
(d) i and iii

Ans: (c)

Q22. The use of biofertilizer helps in increasing the supply of primary nutrients to plants. Which of the following is/are examples of biofertilizers?

1. Azotobacter
2. Rhizobium
3. Azospirillium Choose the correct option.

(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q23. Read the following statements regarding ECO-India plan.

i. It is a two -year project is co-funded by the European Commission's Seventh Framework Programme (FP7).

ii. It is focused on developing innovative and sustainable approaches for producing potable water at a community level.

iii. The first rural community deployment of the plan will be in West Bengal.

Choose the correct option.

(a) only i
(b) i and iii
(c) ii and iii
(d) only ii

Ans: (c)

Q24. Which of the following is incorrect.

i. India is the world's sixth largest and second fastest growing producer of greenhouse gases.

ii. Delhi, Mumbai and Chennai are three of the world's least polluted cities.

iii. Two-thirds of city dwellers lack sewerage; one-third lack portable, clean water.

(a) only i
(b) i and ii
(c) ii and iii
(d) only iii

Ans: (a)

Q25. Which of the following best describes/ describe the aim of 'Green India Mission' of the Government of India?

(IAS Prelims 2016)

1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'
2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future
3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures

Select the correct answer using the code given below.

(a) 1 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3

Ans: (c)

Q26. Which of the following are the key features of „National Ganga River Basin Authority (NGRBA)'?

(IAS Prelims 2016)

1. River basin is the unit of planning and management.

2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.
Select the correct answer using the code gi v-en Below.
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

LEVEL-2

Q1. Green house effect is warming due to
(a) **infra-red rays reaching earth**
(b) moisture layer in atmosphere
(c) increase in temperature due to increase in carbon dioxide concentration of atmosphere
(d) ozone layer of atmosphere.

(a) 2020
(b) 2025
(c) 2030
(d) 2050

Ans: (c)

Q2. Sustainable Development Goals and targets are to be achieved by:

Ans: (c)

Q3. "A Million Voices: The World We Want" is report by:
(a) WHO
(b) IUCN
(c) UNISEF
(d) UN

Ans: (d)

Q4. Which among the following is not a ta r-get under sustainable development goals?
(a) Zero poverty
(b) Quality education
(c) Combat HIV/AIDS, Malaria and Other Diseases
(d) Decent work and economic growth

Ans: (c)

Q5. Sustainable Development implies: *(a)* **Sustained Development in real GDP**
(b) Long lasting development without neg a-tively impacting the environment
(c) Full exploitation of natural resources
(d) Reduction in unemployment and poverty

Ans: (b)

Q6. The objective of the Green energy Co r-ridor is to:
(a) Create special industrial zones which will be po w-ered by renewable energy.
(b) Fund geothermal based energy projects.
(c) Facilitate the flow of renewable energy into the n a-tional power grid.
(d) none of the above.

Ans: (c)

Q7. The 12th Five year plan aims at: *(a)* **Greening 5 million ha under Green India Mission.**
(b) Integrated Ecotourism District Plans co v-ering 10% of all potential Protected Areas (PAs) by 2017.
(c) Cleaning all the critically polluted rivers by 2020 and 80% by 2017.
(d) All of the above

Ans: (d)

Q8. National Mission for a Green India' under National Action Plan on Climate Change (NAPCC) is replacing:
(a) National Mission on Combating Desertification
(b) National Afforestation Programme
(c) Forest Conservation programme
(d) Joint Forest Management programme

Ans: (b)

Q9. The 'Neeranchal' initiative is for: *(a)* **Giving impetus to watershed development in the country**
(b) Providing safe and clean drinking water
(c) Providing water for industries
(d) Popularizing drip and sprinkle irrigation

Ans: (a)

Q10. Which committee has been constituted to assess ground situation at Cauvery basin?
(a) M N Rao Committee
(b) KK Paul Committee
(c) GS Jha Committee
(d) SK Jha Committee

Ans: (c)

Q11. What is the theme of 2016 Intern a-tional Day for Disaster Reduction?
(a) My City is Getting Ready!
(b) Live to Tell
(c) Living with Disability and Disaster
(d) Resilience is for Life

Ans: (b)

Q12. Which state chief minister of India has been honoured with the 2016 Sustainable Development Leadership Award?

(a) Okram Ibobi Singh
(b) T R Zeliang
(c) Pawan Chamling
(d) Naveen Pattanaik

Ans: (c)

Q13. Which of the following adjustments would be made to any increase in GDP in order to derive an „Index of Sustainable Economic Welfare' (ISEW)?

(a) Subtract the monetary value of non-defensive public expenditures
(b) Subtract the monetary value of personal consumption
(c) Subtract the monetary value of capital formation
(d) Subtract the costs of environmental degradation

Ans: (d)

Q14. Which of the following is NOT a characteristic of the "emissions trading" policy instrument?

(a) It involves a mechanism whereby the permits available are initially distributed to producers who are potential emitters of a given pollutant
(b) The price mechanism for tradable emissions permits helps to allocate the restricted supply of permits to those who most value them
(c) All producers are required to be equally efficient in reducing emissions of the pollutant
(d) The right to pollute can be transferred between different parties at a price determined by the market in tradeable emissions permits

Ans: (c)

Q15. Which one of the following characteristics is widely regarded as being an important aspect of sustainable development?

(a) Inter-generational equity
(b) Increasing consumption expenditure
(c) Intra-generational inequity
(d) Increased levels of saving

Ans: (a)

Q16. Why is transport one of the most intractable factors in considering the global environmental problem?

(a) Our transport capabilities worldwide have not expanded fast enough for us to cope with the consequences of global warming
(b) Transport demand grows faster than possible technological improvements can reduce the output of greenhouse gases and the depletion of nonrenewable fossil fuel reserves
(c) Reducing the growth of the transport sector will hold back economic growth, and hence reduce the resources we have available to deal with the global environmental problem
(d) World oil refinery capacity has failed to expand in line with the demand for internal combustion fuels

Ans: (b)

Q17. What do we mean when we say "think globally, act locally" in relation to environmental problems?

(a) Global environmental problems are essentially issues which need to be solved by international negotiations, and in the interim individuals must take care to protect themselves from any adverse consequences produced for them by these problems
(b) Environmental problems have to be thought about at a global level in order to get an accurate idea of the total problem facing us, but these problems are essentially produced by our activities as individuals and firms at a local level, and it is at this level that we must focus our responses
(c) Extensive research and thinking has been carried out by global level research organizations about the causes of environmental problems, which have produced possible strategies and actions which can be applied at a local level
(d) While these problems, as we experience them in relation to sustainability issues, are produced by processes operating at a global level, we all have a role to play in our local context in making individual and collective responses, as communities and companies, which will help ameliorate the effects of these problems

Ans: (d)

Q18. Focusing on reducing carbon production to reduce carbon dioxide emissions is argued to be the wrong variable to focus on because:

(a) It is impossible to achieve
(b) The focus should be on carbon consumption
(c) It has nothing to do with carbon dioxide emissions
(d) The focus should be on carbon elimination

Ans: (b)

Q19. We have had twenty years of international conferences on what to do about the global environmental crisis, and some commentators say absolutely nothing has been achieved.

This shows that:

(a) There is a complete lack of international commitment to positive action
(b) It is very difficult to devise appropriate policies
(c) The environmental crisis is only one of the issues that nations negotiate about, and agreement on environmental issues has to be compatible with agreements on other issues, such as trade

(d) There is no agreement on the environmental issues facing the global community

Ans: (c)

Q20. "NTR Arogya Raksha" a new health scheme has been launched by which state government?

(a) Haryana
(b) Odisha
(c) Karnataka
(d) Andhra Pradesh

Ans: (d)

Q21. Who has been appointed as an Adviser (policy & planning) in the National Disaster Management Authority (NDMA)?

(a) Sandip Ray Chaudhury
(b) V Thiruppugazh
(c) P K Mishra
(d) Manoj Kumar Sahoo

Ans: (d)

Sustainable Development (SD)

LEVEL-1

Q1. Which of the following are the 17 new Sustainable Development Goals?

1. Conserve and sustainably use the oceans, seas and marine resources
2. Reduce inequality within and among cou n-tries
3. Take urgent action to combat climate change and its impacts

(a) 1, 3
(b) 2, 3
(c) 1, 2
(d) All of the above

Ans: (d)

Q2. Which of the following statements is/are correct about IWAI?

1. IWAI is the statutory authority in charge of the waterways in India.
2. National Waterways 6 is a proposed w a-terway between Lakhipur and Bhanga of the Barak River.

Find the correct answer from the codes:

(a) Only 1
(b) Only 2
(c) Both
(d) None

Ans: (c)

Q3. What is not true about "The Earth Summit in Rio de Janeiro 1992"?

1. The first global environment conference, the UN sought to help Governments rethink economic development and find ways to halt the destruction of irreplaceable natural r e-sources and pollution of the planet.
2. The first global environment conference, the UN sought to help Governments rethink political development and find ways to halt the destruction of irreplaceable natural r e-sources and pollution of the planet.
3. The second global environmental confe r-ence, the UN sought to help Governments r e-think environmental development and find ways to halt the destruction of irreplaceable natural resources and pollution of the planet.

Code:

(a) Only 1
(b) Only 2
(c) 1, 2, and 3
(d) All are incorrect

Ans: (a)

Q4. The Kudumbashree programme by the Kerala government works in the area of:

1. Reducing maternal mortality 2. Providing micro credit
3. Enhancing entrepreneurship 4. Providing housing Select the correct answer using the codes given below: Code:

(a) 1 and 2 only
(b) 1, 3 and 4 only
(c) 2 and 3 only
(d) 1, 2 and 4 only

Ans: (c)

Q5. Which of the following are correct r e-garding Sustainable development goals? 1. They were accepted by the governments in COP 21

2. There are total 17 goals present under SDG
3. SDG talks about inequality within country only and nothing about in between the cou n-tries.

Codes:

(a) 1, 2
(b) 2, 3
(c) 2 only
(d) All

Ans: (c)

Q6. Which of the following statement *(s)* is/are correct as per aims of the 12th Plan?

1. Reducing head count poverty by 10%.
2. Generate 10 million new work opportun i-ties in the non -farm sector and provide skill certification to equivalent numbers during the Twelfth Five Year Plan.
3. Provide access to banking services to all Indian households by the end of plan period.
4. Major subsidies and welfare related benef i-ciary payments to be shifted to direct cash transfer using the Aadhar platform with linked bank accounts by the end of the plan period.

Codes:

(a) Only 1 and 3
(b) Only 1 and 2
(c) Only 1 and 4
(d) 1, 2, 3 and 4

Ans: (c)

Q7. Which of the following statement (s) is /are correct? 1. The 8 Millennium Develo p-ment Goals will be replaced by 17 Sustain a-ble Development Goals.

2. These 17 SDGs will be adopted by Me m-ber States at the Sustainable Development Summit in September 2015.

Codes:
(a) Only 1
(b) Only 2
(c) Both 1 and 2
(d) None of the above

Ans: (c)

Q8. Consider the following statements about the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA):

I. The programme aims to reduce maternal and infant mortality rates through safe pre g-nancies and safe deliveries

II. The programme provides comprehensive and quality antenatal care to pregnant women on the 9th of every month in government hospitals

III. The programme also involves the doctors from the private sector to provide free se r-vices Which of the above statements are co r-rect? Code;

(a) I & II Only
(b) II & III Only
(c) I & III Only
(d) I, II & III

Ans: (d)

Q9. Consider the following statement (s) related to Rio+20, 1992

I. Securing renewed political commitment for inclusive development

II. Assessing the progress and implement a-tion gaps in meeting previous commitments

III. Addressing new and emerging challenges What is/are not the objectives of Rio+20, 1992 Conference? Code:

(a) Only I
(b) Only II
(c) Only I & II
(d) I, II, III

Ans: (a)

Q10. Which of the followings are the aims of the Basel Convention?

I. The reduction of hazardous waste gener a-tion and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal;

II. The restriction of trans -boundary mov e-ments of hazardous wastes except where it is perceived to be in accordance with the princi-ples of environmentally sound management.

III. A regulatory system applying to cases where transboundary movements are permi s-sible Codes

(a) Only I & II
(b) Only I & III
(c) Only II & III
(d) All of the above

Ans: (d)

Q11. With reference to push factors, which of the following is/ are economic factors r e-sponsible for migration of villagers towards cities take?

I. Better and more opportunities
II. Fragmentation of family owned land
III. Lack of food Codes:

(a) Only I
(b) Only I and II
(c) Only II & III
(d) I, II and III

Ans: (c)

Q12. The United Nations General Assembly (UNGA) has declared the year 2017 as the International Year of Sustainable Tourism Development. In this context consider the following statements:

I. The declaration recalls to advance the un i-versal 2030 Agenda

II. Tourism falls under three targets of the SDGs, i. e., Goals—8, 12 and 14

III. UNTO is the United Nations Specialized Agency for Tourism What is/are correct? Codes:

(a) Only III
(b) Only I & III
(c) Only II
(d) Only I & II

Ans: (d)

Q13. In the context of recently concluded sixth edition of Asia Pacific Ministerial Conference on Housing and Urban Development (APMCHUD), New Delhi, consider the following statements;

I. Urban Agenda was adopted at the UN Conference on Housing and Sustainable Urban Development, known as "Habitat III" conference

II. APMCHUD is an intergovernmental mechanism for collaboration and cooperation in the field of housing and development among East Asia countries.

III. It adopted Delhi Declaration and implementation plan for aligning urban development strategies of member countries with New Urban Agenda adopted at Quito, Eucador.

IV. Asia Pacific Region accounts for 60% of the world population and 55% of global urban population.

Find the correct answer from the given code.

Code:

(a) Only I, II & IV
(b) Only I, II & III
(c) Only I, III & IV
(d) All of the above

Ans: (c)

Q14. India has achieved the poverty reduction target, however, progress is uneven. In this context consider the following statements.

I. In order to meet the 2015 target, the PHCR level has to be 23.9%.

II. India developed its position due to economic growth including in agriculture as well as increased social spending on interventions such as MGNREGA and the National Rural Health Mission (NRHM).

III. By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day

IV. A cut by the union government in the social sector schemes will not be a challenge to achieve goal 1.

Which of the following statement *(s)* is/are correct?

Code:

(a) Only III & IV
(b) Only I, II & III
(c) Only I & III
(d) All of the above

Ans: (b)

Q15. Consider the following statements

1. The sustainable development goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The sustainable Development Goals have to be achieved by 2030.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q16. Which of the following best describes/describe the aim of „Green India Mission' of the Government of India

1. Incorporating environmental benefits and costs into the Union and State Budgets there by implementing the 'green accounting'
2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future
3. Restoring and enhancing forest cover responding to climate change by a combination of adaptation and mitigation measures Select the correct answer using the code given below;

(a) Only 1
(b) Only 2 and 3
(c) Only 3
(d) Only 1, 2 and 3

Ans: (c)

Q17. Which of the following statements regarding „Green Climate Fund' is/are correct?

1. It is intended to assist the developing countries in adaptation and mitigation practices to counter climate change.
2. It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank.

Select the correct answer using the code given below:

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q18. The 'Kudumba shree' Programme is:
1. A woman oriented community based po v-erty eradication programme.
2. A programme to encourage savings among poor women.
3. A programme to provide monetary assi s-tance to the women to meet the cost of deli v-ery.
Which of the above statement (s) is/are co r-rect? (a) Only 1 and 2 (b) Only 3
(c) Only 1 (d) 1, 2 and 3

Ans: (a)

Q19. (a) With reference to the International Union for Conservation of Nature and Na t-ural Resources (IUCN) and the Convention on International Trade in Endangered Sp e-cies of Wild Fauna and Flora (CITES), which of the following statements is/are cor-rect?
1. IUCN is an organ of the United Nations and CITES is an international agreement b e-tween governments. 2. IUCN runs thousands of field projects around the world to better manage natural environments.
3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws.
Select the correct answer using the code gi v-en below. Code:
(a) Only 1
(b) Only 2 and 3
(c) Only 1 and 3
(d) 1, 2 and 3

Ans: (b)

Q20. Which of the following is incorrect about organic farming: - 1. It uses biological pest control techniques
2. It saves water
3. It can immediately meet the goals of food security
4. It uses fertilizers Select the correct answers using the choices given below: (a) 2 only (b) 1 & 2 only
(c) 2 & 3 only (d) 2 & 4 only

Ans: (c)

Q21. Consider the following statements: 1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.
Which of the statements given above is/are correct? (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2 EXER-CISE - 2

Ans: (b)

International Rules & Laws

LEVEL-1

Q1. The Access and Benefit Sharing (ABS) Protocol adopted by COP -10 at Nagoya is regarding the fair and equitable sharing of benefits arising from the use of:

(a) The genetic resources of the earth.
(b) Exclusive Economic Zones (EEZs)
(c) Marine and coastal areas significant for 'ecotourism'.
(d) Technology transfer mechanisms for Clean Energy Development.

Ans: (a)

Q2. The 'Montreaux Record' is a register of:

(a) Invasive Alien Species and their ecological hazards outside their native environment.
(b) Wetland sites under the threat of anthropogenic a c-tivities.
(c) Endangered species of tropical and sub -tropical fauna.
(d) Coastal cities under direct threat of consequences of global warming.

Ans: (b)

Q3. What is carbon credit?

(a) It is the difference between the carbon emission a l-lowed and actually emitted carbon
(b) It is the loan amount by IMF for reducing pollution
(c) It is the loan given to poor people for buying Mo d-ern Stoves
(d) All of the above

Ans: (a)

Q4. Which among the following multilateral convention seeks to protect the human health and environment from Persistent Organic Pollutants (POPs)?

(a) Bonn Convention
(b) Stockholm Convention
(c) Rotterdam Convention
(d) Basel Convention

Ans: (b)

Q5. Which of the following state gover n-ments has launched Shyama Prasad Mukherjee Jan Van Vikas Scheme for the development of villages around tiger r e-serves?

(a) Gujarat
(b) Maharashtra
(c) Madhya Pradesh
(d) Rajasthan

Ans: (b)

Q6. The NTCA has recently declared which two national parks as tiger reserves?

(a) Kudremukh and Rajaji
(b) Ratapani and Sunabeda
(c) Guru Ghasidas and Rajaji
(d) Rajaji and Sunabeda

Ans: (a)

Q7. Which one of the following committee was constituted to review environmental laws in the country?

(a) Subramanian Committee
(b) Kasturi Rangan Committee
(c) Madhav Nair Committee
(d) Ullas Karanth Committee

Ans: (a)

Q8. In context of environment, the term "dirty dozen" refers to

(a) 12 most harmful greenhouse gases
(b) 12 ozone depleting substances
(c) 12 persistent organic pollutants
(d) none of the above

Ans: (c)

Q9. The United Nations Frame work Co n-vention on Climate Change (UNFCCC) is an international treaty drawn at:

(a) United Nations Conference on the Human Enviro n-ment, Stockholm, 1972
(b) UN Conference on Environment and Development, Rio de Janerio, 1992
(c) World Summit on Sustainable Development, Joha n-nesburg, 2002
(d) UN Climate change conference, Copenhagen, 2009

Ans: (b)

Q10. Which among the following multila t-eral environment agreements (MEAs) is not correctly paired with the respective issue it deals with?

(a) Montreal Protocol of 1987 – Ozone Depleting Su b-stances
(b) Bonn Convention of 1979 – The conservation of Migratory Species
(c) Basel Convention of 1989 – Regulation of tran s-boundary movement,transit, handling and use of Living Modified Organisms.
(d) Rotterdam Convention of 1998 – Consensual Inte r-national Trade in certain Hazardous Chemicals and Pe s-ticides.

Ans: (c)

Q11. The declaration reached at the 16th Conference of the Parties to the UN Fram e-work Convention on Climate Change (UN-FCCC) in December 2010 is also called the:

(a) Cancun Agreement
(b) Rio Declaration
(c) Kyoto Protocol
(d) Treaty on Nuclear Disarmament

Ans: (a)

Q12. 'Gadgil Committee Report' and „Kasturirangan Committee Report', some-times seen in the news, are related to:

(a) constitutional reforms
(b) Ganga Action Plan
(c) Linking of rivers
(d) Protection of Western Ghats

Ans: (d)

Q13. Environmental Impact Assessment (EIA) is mandatory under which one of the following India legislations:

(a) Indian Forest Act
(b) Air (Prevention and Control of Pollution) Act
(c) Wildlife Protection Act
(d) Environment (Protection) Act

Ans: (d)

Q14. United Nation's Convention to Com-bat Desertification (UNCCD) defines 'desertification' as:

(a) Spread and expansion of deserts
(b) Deserts encroaching arable lands rendering them useless
(c) Land degradation in dry lands resulting from various factors
(d) None of the above

Ans: (c)

Q15. The 'Hyderabad pledge' of COP-11 is regarding:

(a) Commitment to reduce subsidies
(b) Financial Commitment to Wetland conservation
(c) Commitment to reduce emissions
(d) Financial commitment to achieve Aichi targets

Ans: (b)

Q16. Which of the following addresses tr a-ditional knowledge associated with genetic resources considering the rights of the i n-digenous and local communities?

(a) Hyderabad Pledge of COP - 11
(b) Nagoya - Kuala Lumpur Supplementary Protocol
(c) Nagoya Protocol
(d) All of the above

Ans: (c)

Q17. Which among the following awards has been recently instituted by the Gover n-ment of India for individuals or commun i-ties from rural areas that have shown ex-traordinary courage and dedication in pr o-tecting Wildlife?

(a) Indira Gandhi Paryavaran Puraskar
(b) Medini Puruskar Yojana
(c) Amrita Devi Bishnoi Award
(d) Pitambar Pant National Award

Ans: (c)

Q18. What is 'Greenhouse Gas Protocol'? (IAS Prelims 2016)

(a) It is an international accounting tool for government and business leaders to understand, quantify and ma n-age greenhouse gas emissions
(b) It is an initiative of the United Nations to offer f i-nancial incentives to developing countries to reduce greenhouse gas emissions and to adopt eco -friendly technologies
(c) It is an inter-governmental agreement ratified by all the member countries of th e United Nations to reduce greenhouse gas emissions to specified levels by the year 2022
(d) It is one of the multilateral REDD+ initiatives hos t-ed by the World Bank

Ans: (a)

Q19. 'Net metering' is sometimes seen in the news in the context of promoting t he (IAS Prelims 2016)

(a) production and use of solar energy by the hous e-holds/ consumers
(b) use of piped natural gas in the kitchens of hous e-holds
(c) installation of CNG kits in motor-cars
(d) installation of water meters in urban households

Ans: (a)

Q20. 'Gadgil Committee Report' and „Kasturirangan Committee Report', some-times seen in the news, are related to (IAS Prelims 2016)

(a) constitutional reforms

Ans: (d)

LEVEL-2

Q1. The National Air Quality Monitoring Programme (NAMP) run by Central Pollution Control Board, monitors which of the following pollutants at all locations?

1. Carbon dioxide
2. Sulphur dioxide
3. Oxides of nitrogen
4. Suspended particulate matter Select the correct answer using the codes given below:

Codes:
(a) 1, 2 and 3 only
(b) 1 ,3 and 4 only
(c) 2 ,3 and 4 only
(d) 1 ,2, and 4 only

Ans: (c)

Q2. Which of these pairs are correctly matched ?

1. Minamata convention: mercury *(b)* Ganga Action Plan
(c) linking of rivers
(d) protection of Western Ghats2. Stockholm convention: persistant organic pollutants
3. Basel convention: lead Select the correct answer using the codes given below.

Codes
(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1,2 and 3

Ans: (a)

Q3. Consider the following statements:

1. No human activity is allowed inside tiger reserves.
2. Tourism is allowed in national parks.

Which of the statements given above is/are correct?

Codes:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q4. The Wildlife Protection Act, 1972 provides for various categories of protected areas. These include:

1. National parks
2. Wildlife sanctuaries
3. Biosphere reserve
4. Tiger reserves Select the correct answer using the codes given below.

Codes:
(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 4 only

Ans: (d)

Q5. Which of the following are correct

1. Alpha diversity (within -community diversity) refers to the rate of replacement of species along a gradient of habitats or communities.
2. Gamma diversity (overall) refers to the diversity of the habitats over the total landscape or geographical area.

Select the correct answer using the codes given below.

Codes:
(a) Only 1
(b) Only 2
(c) Both 1& 2
(d) Neither 1 nor 2

Ans: (c)

Q6. Over 140 countries have agreed on the first international treaty that aims to reduce the emission and release of mercury into the air, water and land. Treaty is named as the Minamata convention. Which of the following is correct with regard to this treaty:

1. The convention prohibits primary mining of mercury.
2. The use of mercury in products like CFL, batteries, soaps, cosmetics and medical appliances must be phased out by 2020.
3. Treaty keeps exception for the products like vaccines' preservatives and products related to religious faith.

Codes:
(a) 1 only
(b) 1, 2 & 3
(c) 3 only
(d) 1 & 2 only

Ans: (b)

Q7. Forest Rights Act recognizes the rights of forest dwellers over forestland and forest

resources such as minor forest produce they have traditionally been extracting and u sing.

Which of the following statements is/are co rrect with regard to this Act.

1. Forest dwellers can transport minor forest produce by any appropriate means of transport.
2. A committee set up by Gram Sabha issues transit passes for transporting minor forest produce.

Codes:
(a) 1 only
(b) 2 only
(c) Both 1& 2
(d) Neither 1 & 2

Ans: (c)

Q8. The Union Ministry of Environment & Forest has introduced a new scheme called the „Emissions Trading Scheme' which of the following statements is/are correct with regard to this scheme:

1. This is a market -based scheme to reduce air pollution.
2. It has been implemented only in 3 states till now.
3. The scheme allows the Pollution control boards to set a cap on the level of pollution permitted in an industrial area, and then a llows the industries to self regulate to ensure that pollution does not exceed this cap.
4. This scheme is the first of its kind in the world.

Codes:
(a) 1, 2, 3 & 4
(b) 1 & 3 only
(c) 2 & 3 only
(d) 1, 2 & 3

Ans: (d)

Q9. Which of the following statements is/are correct about Dark Matter:

1. Dark matter does not interact with any electromagnetic radiation.
2. Dark matter interacts with ordinary matter through gravity only.
3. The force between dark matter and ord inary matter is repulsive.

Codes:
(a) 1 only.
(b) 1 & 2 only.
(c) 2 & 3 only.
(d) 1, 2 & 3.

Ans: (b)

Q10. The National Green Tribunal Act, 2010 was enacted in consonance with which of the following provisions of the constitution of India?

1. Right to Healthy Environment, construed as a part of Right to Life under Article 21
2. Provision of grants for raising the level of administration in the scheduled Areas for the welfare of Scheduled Tribes under Article 275 (10
3. Powers and functions of Gram Sabha as mentioned under Article 243 *(A)* Select the correct answer using the codes given below:

Codes:
(a) Only 1
(b) Only 2 & 3
(c) Only 1 & 3
(d) 1, 2 & 3

Ans: (a)

Q11. Consider the following pairs of Co nventions and their Objectives:

1. Minamata Convention: Against toxic me rcury and mercury compounds.
2. Cartagena Protocol: Safe transfer, handling and use of living modified organisms resul ting from modern biotechnology.
3. Water Convention: To protect and manage the transboundary surface waters and groundwaters.
4. Espoo Convention: To prevent, reduce and control significant adverse transboundary e nvironmental impact from proposed activities.

Which of the above pairs are correctly matched?

Codes:
(a) 2 and 3 only
(b) 1, 2 and 3 only
(c) 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (d)

Q12. Consider the following questions.

1. The Government of India was the first country in South Asia to join IUCN as a stage member in1969.
2. It is also the first and the only country in the region to host the General Assembly of IUCN in 1969.

Codes:
(a) Only I
(b) Only II
(c) Neither I nor II
(d) Both I and II

Ans: (d)

Q13. Consider the following statements:

1. The International Plant Protection Conve n-tion (IPCC) is a multilateral treaty to protect plant resources from deforestation arising out of industrialization.
2. The treaty is overseen by International U n-ion for Conservation of Nature.

Which of the statements given above is/are correct?
(a) Only 1
(b) Only 2
(c) Only 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q14. Consider the following statements

1. CBIT is an outcome of the UNFCCC's Paris agreement in 2015 and expected to a d-dress the issue of transparency
2. It will help developing countries monitor and report the progress on their climate a c-tions
3. WTO has been requested to act as the tru s-tee for the fund, who was also a trustee in the initial hand holding of GEF Which of the statements given above is/are correct?

Codes:
(a) Only 2 &3
(b) Only 1
(c) Only 1 & 2
(d) Only 3

Ans: (c)

Q15. Consider the following statements:

1. Brundtland Commission was a commission established by the United Nations in 1983 as World Commission on Environment and D e-velopment (WCED).
2. Gro Harlem Brundtland was the former Prime Minister of Japan and was chosen due to her strong background in the sciences and public health.
3. Brundtland Report is formally called as Our Common Future: Report of the World Commission on Environment and Develo p-ment 1987.

Which of the statements given above is/are correct?

Codes:
(a) Only 1 & 3
(b) Only 3
(c) Only 3 & 2
(d) All of the above

Ans: (a)

Q16. What is/are the importance of the „United Nations Convention to Combat Des-ertification'?

1. It aims to promote effective action through innovative national programs and supportive inter-national partnerships.
2. It has a special/particular focus on South Asia and North Africa regions, and its Secr e-tariat facilitates the allocation of major po r-tion of financial resources to these regions.
3. It is committed to bottom -up approach, e n-couraging the participation of local people in combating the desertification.

Select the correct answer using the code gi v-en below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q17. Consider the following statements with respect to „Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)',

1. The focus of the convention is to complete-ly control the trade of wild species.
2. It was formed in 1973 and regulates the i n-ternational trade in over 35,000 w ild species of plants and animals.

Which of the above statement/s is/are co r-rect?

Select the correct code:
(a) Only 1
(b) Only 2
(c) Both 1&2
(d) Neither 1 nor 2

Ans: (b)

Q18. Consider the following statements:
1. IUCN classify protected areas according to their management objectives.
2. National parks of India are in the category IUCN 1.
Which of the statements given above is/are correct?
Codes:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q19. Which of the following wastes have been regulated by the Basel Convention on Control of Transboundary Movements of Hazardous Wastes and their Disposal?
1. PCBs, used lead acid batteries, etc.
2. Biomedical and Healthcare wastes
3. Incinerator Ash
4. Used oils
5. Household waste Which of the statements given above is/are correct?
Codes:
(a) Only 2, 3 and 5
(b) Only 1, 2, 3 and 4
(c) Only 1, 2 and 4
(d) All of the above

Ans: (d)

Q20. Match the following summits with their locations.
1. COP 11 - Copenhagen
2. COP 18 - Lima
3. COP 20 - Doha
4. COP 19 - Warsaw Which of the statements given above is/are correct?
Codes:
(a) Only 1, 2 and 4
(b) Only 1, 2 and 3
(c) All of the above
(d) None of the above

Ans: (d)

Q21. Which of the following are missions under the Nation Action Plan on Climate Change?
1. National Mission for Sustainable Agricu l-ture
2. National Mission for Sustainable Deve l-opment
3. National Mission on Sustainable Habitat
4. National Water Mission
5. National Mission for Enhanced Energy E f-ficiency Which of the statements given above is/are correct?
Codes:
(a) Only 1 and 2
(b) Only 1, 2, 3 and 5
(c) Only 1, 3, 4 and 5
(d) All of the above

Ans: (c)

Q22. The Montreal Protocol on Substances that Deplete the Ozone Layer aims to co n-trol the production and use of:
1. Dichloromethane
2. CFCs
3. HFCs Select the correct answer using the codes given below.
Codes:
(a) 1 and 2 only
(b) 2 only
(c) 2 and 3 only
(d) 1,2 and 3

Ans: (b)

Q23. Consider the following statement and state which of the following is/are true?
1. Montreal Protocol deal with ozone layer depletion and Kyoto Protocol deals with global warming and greenhouse gas emission.
2. Montreal Protocol has banned the emission of hydrofluorocarbons (HFCs).
Select the correct answer using the codes gi v-en below.
Codes:
(a) Only 1
(b) Only 2
(c) Both 1 & 2
(d) Neither 1 or 2

Ans: (b)

Q24. Consider the following statements:

1. The CBD is the first comprehensive global agreement addressing to all aspects related to biodiversity.
2. COP 10 was held from 18 to 29 October 2010 at the Nagoya Conference centre, in Nagoya, Aichi Prefecture, Japan.
Select the correct answer using the codes gi v-en below.
(a) Only 1
(b) Only 2
(c) Both 1& 2
(d) None of the above

Ans: (c)

Q25. Consider the following statements.
1. In 1972 the United Nations held the first international conference on human enviro n-ment in Stockholm.
2. The agenda was prepared by Rene Dubos and other experts.
Select the correct answer using the codes gi v-en below.
Codes:
(a) Only 1
(b) Only 2
(c) Both 1& 2
(d) None of the above

Ans: (c)

Q26. Consider the following statements:
1. 2011—COP was held in South Africa
2. It was COP's 17th meet and MOP's 8th meet.
Which of the statements given above is/are correct?
(a) Only 1
(b) Only 2
(c) Both 1 & 2
(d) None of the above

Ans: (a)

Q27. With reference to the International Union for Conservation of Nature and Na t-ural Resources (IUCN) and the Convention on International Trade in Endangered Sp e-cies of Wild Fauna and Flora (CITES), which of the following statements is/are cor-rect?
1. IUCN is an organ of the United Nations and CITES is an international agreement b e-tween governments
2. IUCN runs thousands of field projects around the world to better manage natural e n-vironments.
3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws.
Select the correct answer using the code gi v-en below.
Codes:
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q28. Which of the following International Conventions (India being a signatory) have a bearing on conservation of wildlife in I n-dia?
1. International Whaling Commission (IWC)
2. Convention on International Trade in E n-dangered Species of wild fauna and flora (CITES)
3. United Nations Educational, Scientific and Cultural Organization -World Heritage Co n-vention
(UNESCO-WHC)
4. Convention on Migratory Species (CMS)
5. International Union for Conservation of Nature and Natural Resources (IUCN)
Choose the correct answer using the codes below:
Codes:
(a) 1, 2 and 3 only
(b) 3, 4 and 5 only
(c) 2 only
(d) All of the above

Ans: (d)

Q29. Which of the following statements r e-garding „Green Climate Fund' is/are cor-rect?
1. It is intended to assist the developing cou n-tries in adaptation and mitigation practices to counter climate change.
2. It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank Select the correct answer using the code given below.
Codes:

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q30. Consider the following about Green Climate Fund (GCF).

1. It was established under United Nations Environment Programme (UNEP).
2. It is aimed at achieving the goal set out by United Nations Framework Convention on Climate Change (UNFCCC).
3. It is a mechanism to redistribute money from the developed to the developing world.

Choose the correct answer using the codes below.

Codes:
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) All of the above

Ans: (b)

Q31. In the context of Amendment to Montreal Protocol, 2017, consider the following statements.

1. 170 countries have reached a historic deal to phase out Hydrofluorocarbons (HFCs) after years of protracted and at times seemingly intractable negotiations in Kigali, Rwanda accepted an amendment to the Montreal Protocol
2. Developing countries must reduce HFCs use by 10% by 2019 from 2011 -2013 levels, and 85% by 2036.
3. A third group of developing countries, including India, Pakistan and Arab Gulf states, must begin the process in 2028 and reduce emissions by 10% by 2032 from 2024-2026 levels, and then by 85% by 2047 Choose the correct answer using the codes below.

(a) Only 2 & 3
(b) Only 2
(c) Only 1 & 3
(d) All of the above

Ans: (c)

Q32. The term „Intended Nationally Determined Contributions' is sometimes seen in the news in the context of (IAS Prelims 2016)

(a) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East
(b) plan of action outlined by the countries of the world to combat climate change
(c) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
(d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

Ans: (b)

Q33. What is/are the importance/importance of the „United Nations Convention to Combat Desertification'? (IAS Prelims 2016)

1. It aims to promote effective action through innovative national programs and supportive inter-national partnerships.
2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilitates the allocation of major portion of financial resources to these regions.
3. It is committed to bottom -up approach, encouraging the participation of local people in combating the desertification.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q34. Consider the following pairs : (IAS Prelims 2016) Terms sometimes seen in the news Their origin

1. Annex-I Countries Cartagena Protocol
2. Certified Emissions Reductions Nagoya Protocol
3. Clean Development Mechanism Kyoto Protocol Which of the pairs given above is/are correctly matched?

(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3

Ans: (c)

Q35. With reference to 'Agenda 21', sometimes seen in the news, consider the follo wing statements :

1. It is a global action plan for sustainable d evelopment
2. It originated in the World Summit on Su stainable Development held in Johannesburg in 2002.

Which of the statements given above is/are correct?
(IAS Prelims 2016)

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Latest Events

LEVEL-1

Q1. Which of the following state where mass nesting of the endangered Olive Ridley turtle takes place was given marine sanctuary status?

(a) West Bengal
(b) Odisha
(c) Tamil Nadu
(d) Kerala

Ans: (b)

Q2. Inshore mechanized fishing leading to ecological damage has been observed in

(a) Kerala
(b) Goa
(c) Tamil Nadu
(d) All the above

Ans: (d)

Q3. Which of the following project is related to mechanized fishing ?

(a) Indo-Norwegian Project
(b) Indo-Chinese Project
(c) Indio-Sri Lankan Project
(d) Indo-Tibetan Project

Ans: (a)

Q4. Which state *(s)* has/have fully exploited maximum sustainable yield?

(a) Maharashtra
(b) Tamil Nadu
(c) Both *(a)* and *(b)*
(d) None of the above

Ans: (c)

Q5. Which of the following species of exotic fish have affected marine ecology ?

(a) Brown Trout
(b) Loch Leven Trout
(c) Rainbow Trout
(d) All the above

Ans: (d)

Q6. Algale blooms can be monitored by u sing

(a) Ocean Colour Monitor sensors
(b) Pressure censors
(c) Temperature sensors
(d) Both *(b)* and *(c)*

Ans: (d)

Q7. Which of the following includes ecosy stem modelling?

(a) Hydrodynamic modelling of Chilika Lake
(b) Hydrodynamic modelling of Dal Lake
(c) Agronomic modelling of Chilika Lake
(d) Both *(a)* and *(b)*

Ans: (a)

Q8. Which of the following forms the part of Project Green Ports?

(a) Green Ports Initiatives
(b) Swachh Bharat Abhiyaan
(c) Ujwal Bharat
(d) Both *(a)* and *(b)*

Ans: (d)

Q9. A new colour code is implemented in hospitals of Visakhapatnam to

(a) for disposal of
(b) for producing biogas
(c) for the treatment of cancer
(d) to mark energy consumption

Ans: (a)

Q10. Recently, attempts have been made to produce electricity from

(a) wood
(b) food waste
(c) coal
(d) radioactive material

Ans: (b)

Q11. Which of the following is correct about World Wide Fund for Nature's (WWF) 2014 Living Planet Report.

(a) Wildlife population have declined by 52 percent
(b) Wildlife populations have increased by 1 percent
(c) Wildlife populations have shown no change.
(d) Population of Tigers has increased

Ans: (a)

Q12. The event Kanha -Pench Walk 2016 was held to conserve

(a) Tigers
(b) Lions
(c) Elephants
(d) Deer

Ans: (a)

Q13. Which of the following animals' behavior was studied by Dudhwa Tiger Reserve and National Trust for Nature Conservation (NTNC) with the help of a monitoring technique.

(a) Tiger
(b) Lion
(c) Greater One-Horned Rhinoceros
(d) Elephants

Ans: (c)

Q14. Which of the following components was recently introduced in the scheme 'I ntegrated Development of Wildlife Habitats'?
(a) Recovery of Endangered Species
(b) Conservation of lions
(c) Recovery of tigers
(d) Recovery of Elephants

Ans: (a)

Q15. Movement of lions, tigers, elephants, olive ridley turtles and other wild animals can be monitored with the help of
(a) Radio collars
(b) Global Positioning System
(c) Satellite uplink facilities
(d) All the above

Ans: (d)

Q16. Which of the following tribes organize a month-long ecological campaign/festival?
(a) Gond
(b) Korku
(c) Bhail
(d) Both (a) and (b)

Ans: (d)

Q17. 'Operation Guerrilla Green' mov e-ment was held in which of following states?
(a) Uttar Pradesh
(b) Madhya Pradesh
(c) Rajasthan
(d) Odisha

Ans: (b)

Q18. World's largest artificial sun is called
(a) Synlight
(b) Sonlight
(c) ArtSun
(d) Sunlit

Ans: (a)

Q19. Which of the following rating metho d-ology has been introduced by the Bureau of Energy Efficiency (BEE) for air conditio n-ers?
(a) Indian Seasonal Energy Efficiency Ratio
(b) Indian Energy Efficiency Ratio
(c) House Energy Rating Ratio
(d) None of the above

Ans: (a)

Q20. Which of the following is true for I n-verter Air Conditioners?
(a) They can operate on inverters
(b) They consume less energy
(c) Their rating is based on Indian Seasonal Energy E f-ficiency Ratio
(d) Both (b) and (c)

Ans: (d)

Q21. Ocean Colour Monitor sensors are used to monitor
(a) fish movement
(b) algal blooms
(c) oil spills
(d) both a and b

Ans: (b)

Q22. Which of the following resulted in the reduction of the number of dolphins from Ganga.
(a) Construction of dams
(b) water pollution
(c) industrial effluents
(d) all the above

Ans: (d)

Q23. Which of the following is correct about BS -III vehicles in India?
(a) BS -III vehicles have been banned in India.
(b) Manufactures of BS -III vehicles will have to pay more tax for BS -III vehicles.
(c) BS-IV trucks are 80 per cent cleaner than BS-III.
(d) both a and c

Ans: (d)

Q24. Which of the following help in pr e-venting desertification?
(a) United Nations Convention to Combat Desertific a-tion
(b) Indian Convention to Combat Desertification
(c) World Convention to Combat Desertification
(d) United Nations Convention on Preventing Desertif i-cation Choose the correct option.

Ans: (a)

LEVEL-2

Q1. Read the following statements regarding the Economics of Ecosystems and Biodiversity (TEEB)?

(i) It is a study by environmental economist Pavan Sukhdev.
(ii) It is an international initiative that focuses on global economic benefits of wildlife.
(iii) Its objective is to highlight the growing cost of biodiversity loss and ecosystem degradation.
Choose the correct option.
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (i), (ii) and (iii)
(d) (i) and (iii)

Ans: (d)

Q2. Read the following statements regarding Tiger Repository.

(i) The Wildlife Institute of India (WII) has India's first repository on tigers, under its new Tiger Cell.
(ii) The repository consists of huge database on tiger conservation and population estimation which has been prepared with collaborated effort with the National Tiger Conservation Authority (NTCA).
(iii) India's first tiger cell was set up at Forest Research Institute.
Choose the correct action.
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (i) and (iii)
(d) (i), (ii) and (iii)

Ans: (a)

Q3. Read the following statements regarding Operation Thunder Bird.

(i) Wildlife Crime Control Bureau (WCCB) has launched the programme.
(ii) It aims at preventing hunting of endangered birds.
(iii) It is code-name of International Criminal Police Organization.
Choose the correct option.
(a) (ii) and (iii)
(b) (i) and (iii)
(c) (i) and (iii)
(d) (i), (iii) and (iii)

Ans: (c)

Q4. Read the following statements about Project Tiger.

(i) It was launched in April 1973.
(ii) It aimed at ensuring a viable population of Bengal tigers in their natural habitats and also to protect them from extinction.
(iii) It was launched under the Wildlife Conservation
Act.
Choose the correct option.
(a) (ii) and (iii)
(b) (i) and (iii)
(c) (i) and (ii)
(d) (i), (ii) and (iii)

Ans: (d)

Q5. Read the following statements regarding Blue Economy.

(i) It refers to the integration of ocean economy development with the idea of social inclusion and environmental sustainability.
(ii) It uses renewable and organic inputs to feed into sustainably designed systems.
(iii) It does not help reduce waste disposal.

Ans: (c)

Q6. Read the following statements regarding coastal conservation in India.

(i) Coastal Regulation Zone (CRZ) Rules proposes to remove the ban on reclamation of land in coastal areas for commercial or tourism activities even in ecologically-sensitive areas.
(ii) Agenda 21 focuses on reduction in fishing activities.
Choose the correct option.
(a) (i)
(b) (ii)
(c) both *(i)* and (ii)
(d) none of the above

Ans: (a)

Q7. Read the following statements regarding Coastal Ocean Monitoring and Prediction System.

(i) It predicts the level of dissolved oxygen and nitrate in the sea close to the shore.

(ii) The movement of oil during oil spills has been studied with the help of the system.
(iii) The coats of Goa, Kerala and Visakhapatnam have used the system.
Choose the correct option.
(a) (i), (ii) and (iii)
(b) (i) and (iii)
(c) (ii) and (iii)
(d) (i) and (ii)

Ans: (a)

Q8. Read the following statements regarding Project Green Ports.
(i) It was a part of Swachh Bharat Abhiyaan.
(ii) It aims at acquiring dust suppression system.
(iii) It bans fishing activities along coast.
Choose the correct option.
(a) only *(i)*
(b) (i) and (ii)
(c) (ii) and (iii)
(d) (i), (ii) and (iii)

Ans: (b)

Q9. Read the following statements regarding Indian marine ecology.
(i) Ecological damage is caused by inshore mechanized fishing in state like Kerala, Goa, Tamil Nadu, Orissa.
(ii) Indo -Norwegian Project is related to installing solar plants along the coast.
(iii) Marine ecology is affected by exotic fish.
Choose the correct option.
(a) (i) and (iii)
(b) (ii) and (iii)
(c) (i), (ii) and (iii)
(d) Only (iii)

Ans: (a)

Q10. Read the following statements regarding Ecosystem Modelling.
i. It has been used for hydrodynamic modelling of Chilika and Kochi backwaters.
ii. Water quality criteria for copper, cadmium and mercury have been determined.
iii. It focuses on 20 training programmes on hazard mapping, satellite oceanography, and marine pollution.
Choose the correct option.
(a) i and ii
(b) ii and iii
(c) i, ii and iii
(d) only i

Ans: (c)

Q11. Which of the following is not correct regarding Ganga Action Plan.
(i) It was launched by the National Ganga River Basin Authority.
(ii) It aimed at beatification of Ganga.
(iii) It focused on rehabilitation of soft - shelled turtles.
Choose the correct option.
(a) only *(i)*
(b) (i) and (ii)
(c) (ii) and (iii)
(d) only (ii)

Ans: (d)

Q12. With reference to a conservation organization called Wetlands International', which of the following statements is/are correct?
(i) It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
(ii) It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.
Select the correct answer using the code given below.
(a) Neither *(i)* nor (ii)
(b) only *(i)*
(c) both *(i)* and (ii)
(d) (ii) only

Ans: (d)

Q13. Read the following statements regarding Montreux Record.
i. It is a register of wetland sites where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments.
ii. It is maintained as part of the Ramsar List.
Choose the correct option.
(a) Neither i nor ii
(b) only i
(c) both i and ii
(d) ii only

Ans: (c)

Q14. Read the following statements regarding Indian wetlands.

(i) Largest wetland of India includes Ve m-banad lake, Chilika lake, Kolleru lake and Loktak Lake.
(ii) Remote Sensing and Geographic Info r-mation System (GIS) tools have been used in flood zonation mapping in wetlands.
(iii) Normalized Difference Vegetation Index (NDVI) is used for separation of wetland ar e-as.
Choose the correct option.
(a) (i), (ii) and (iii)
(b) (ii) and (iii)
(c) only (ii)
(d) (i) and (iii)

Ans: (a)

Q15. Read the following statements regar d-ing Indian Himalayan ecology.
(i) Climate change in the Indian Himalayan region is monitored by National Mission for Sustaining the Himalayan Ecosystem (NMSHE).
(ii) Indian Himalayas Climate Adaptation Programme
(IHCAP) aims to study climate change i m-pacts on natural resources.
(iii) Himalayan plants include Blue Poppy, Creeping Cotoneaster, and Deodar Cedar.
Choose the correct option.
(a) only (iii)
(b) (i), (ii) and (iii)
(c) (i) and (iii)
(d) only (i)

Ans: (b)

Q16. Read the following statements regar d-ing Madhav Gadgil Committe Report on Western Ghat.
(i) The Western Ghats Ecology Expert Panel (WGEEP) designates the Western Ghat as an Ecologically Sensitive Area (ESA).
(ii) Gadgil report recommended that permi s-sion need to be sought for dam construction in Ecological Sensitive Zone 1.
(iii) The constitution of a Western Ghats Ecology Authority (WGEA) was reco m-mended as a statutory authority under th e Ministry of Environment and Forests.
Choose the correct option.
(a) (ii) and (iii) (a) (i) and (iii)
(c) (i) and (iii)
(d) (i), (ii) and (iii)

Ans: (c)

Q17. Read the following statements regar d-ing Eco-cities in India.
(i) Six medium and small Eco -cities were planned by the Ministry of Environment and Forest (MoEF) in association with Central Pollution Control Board
(CPCB).
(ii) The focus of the project was pollution control and improvement of environmental quality.
(iii) One of the proposed eco -cities is Che n-nai.
Choose the correct option.
(a) (i) and (ii)
(b) (i) and (iii)
(c) (ii) and (iii)
(d) (i), (ii) and (iii)

Ans: (a)

Q18. Read the following statements regar d-ing forest conservation.
(i) National Forest Commission was set up in 2002 to review and assess India's policy and law on forest
(ii) Chipko Movement stated in 1975 for fo r-est conservation.
(iii) Jhum cultivation helped in forest conse r-vation.
Choose the correct option.
(a) only i
(b) i and ii
(c) ii and iii
(d) i and iii

Ans: (a)

Q19. Read the following statements regar d-ing Forest Carbon Partnership Facility.
(i) It is an Indian organisation which focuses on reducing emissions.
(ii) It aims at enhancing forest carbon stocks in developed countries.
Choose the correct option.
(a) (i)
(b) (ii)
(c) (i) and (ii)
(d) None of the above

Ans: (d)

Q20. Read the following statements regar d-ing Indian Forest Survey 2013.

(i) Main reasons for declined forest cover i n-clude abiotic pressure.

(ii) Odisha has highest density of forest.

(iii) Shortening of Jhum cycle causes forest loss.

Choose the correct option.

(a) (i) and (ii)
(b) (ii) and (iii)
(c) (i), (ii) and (iii)
(d) only (iii)

Ans: (d)

Q21. Read the following statements regar d-ing International Solar Alliance.

(i) It is an alliance of more than 120 cou n-tries.

(ii) Its objective is efficient exploitation of so-lar energy to reduce dependence on fossil fuels.

(iii) India has set a target of installing 100GW by 2022 with the help of the alliance.

Choose the correct option.

(a) (i), (ii) and (iii)
(b) (ii) and (iii)
(c) (i) and (iii)
(d) only *(i)*

Ans: (a)

Previous Year MCQs

Q1. Which one of the following plants is e f-fective in reducing water pollution and is also useful for producing biogas?
(a) Eucalyptus
(b) Water hyacinth
(c) Salvinia
(d) Lotus

Ans: (c)

Q2. Consider the following statements r e-garding 'biomedication'. It involves the use of bacteria and fungi to
1. Clean up aquifers.
2. Clean up toxic dumps
3. Clean up oil spills
4. Cure bacterial and fungal disease Of these statements:
(a) 1 and 2 are correct
(b) 1 and 3 are correct
(c) 1, 2 and 3 are correct
(d) 1, 2, 3 and 4 are correct

Ans: (c)

Q3. Which of the following parks/ sanctua r-ies is/are correctly matched with their loc a-tion:
1. Gharana—Assam 2. Gir—Rajasthan
3. Manas—Assam 4. Corbett—M.P.
5. Periyar—Kerala 6. Dudwa—U.P.
Codes:
(a) 1 only
(b) All of the above
(c) 5 and 4 only
(d) 3 and 5 only

Ans: (d)

Q4. Match the columns:
A. Kaziranga National Park : 1. Gujarat
B. Gir National Park : 2. Madhya Pradesh
C. Bandipur National Park : 3. Assam
D. Kanha National Park : 4. Karnataka Select the correct answer from the codes given below:
A B C D
(a) 1 3 4 2
(b) 3 1 4 2
(c) 4 2 1 3
(d) 4 2 3 1

Ans: (b)

Q5. Why DDT is banned in western cou n-tries?
(a) It remains in environment for a long time
(b) The insects are immunised
(c) It is a highly poisonous insecticide
(d) None of the above

Ans: (c)

Q6. Of the various wildlife and forest obse r-vation schemes undertaken with world aid funds in India, which one has been the most successful project?
(a) Project Tiger
(b) Mangroves arid wetland development
(c) Development of national parks
(d) protection/conservation of forests in Terai region

Ans: (a)

Q7. Within biological communities, some species are important in determining the ability of a large number of other species to persist in the community.
Such species are called
(a) Keystone species
(b) Allopatric species
(c) Sympatric species
(d) Threatened species

Ans: (a)

Q8. Which one of the following chemicals is responsible for the depletion of ozone layer in the atmosphere?
(a) Chlorofluorocarbons
(b) Nitrous oxide
(c) Sulphur dioxide
(d) Carbon dioxide

Ans: (a)

Q9. What proportion of geographical land area is under actual forest cover in India?
(a) One-fifth
(b) One-fourth

(c) One-third
(d) Two-fifths ON ENVIRONMENT, AND CLIMATE

Ans: (a)

Q10. Which of the following strongly threatens biodiversity?
(a) Fragile ecosystems such as mangroves and wetlands
(b) Inaccessible habitats in Himalayas
(c) Destruction of natural habitats and vegetation and shifting cultivation
(d) Creation of biosphere reserves

Ans: (c)

Q11. Acid precipitation is now regarded as a serious problem in some European and Asian countries. Its major cause or source is
(a) discharge of acidic effluents onto neutral or slightly alkaline land where the acidic components precipitate
(b) emissions of sulphur oxides and nitrogen oxides from thermal power plants and burning of fossil fuels; these oxides dissolve in atmospheric water vapour and fall back on earth as acid rain
(c) natural carbon dioxide released during respiration of living organisms dissolves in water, forming carbonic acid which is the chief contributor to acidity in rain water
(d) chloro-fluoro-carbons readily react with various chemicals near the earth's surface, producing acidic intermediates which cause acid precipitation.

Ans: (b)

Q12. Which one of the following does provide the best estimate of world's biological diversity?
(a) Of about ten million species probably alive today, some 20 species are lost everyday, most of them unknown because no more than half a million have yet not been actually identified by scientists.
(b) Of about thirty million living species, some 50 are lost everyday, most of them unknown because no more than one million have been actually identified.
(c) Of about forty five million living species, some 100 are lost every day, most of them unknown because no more than 1.5 million have been actually identified.
(d) Of about seventy five million living species, some 500 are lost every day, most of them unknown because no more than 3 million have been actually identified.

Ans: (d)

Q13. The greatest diversity of animal and plant species occurs in
(a) temperate deciduous forests
(b) tropical moist forests
(c) heavily polluted rivers
(d) deserts and savannas

Ans: (b)

Q14. If water pollution continues at its present rate, it will eventually
(a) stop water cycle
(b) prevent precipitation
(c) make oxygen molecules unavailable to water plants
(d) make nitrate unavailable to water plants

Ans: (c)

Q15. In recent years, there has been some concern over the threat posed by the Mathura Oil Refinery and the thermal power plants to the TajMahal in Agra.
The scientific basis of any possible damage to the Taj is mainly
(a) stratospheric ozone and the chlorofluorocarbons which destroy it
(b) acid precipitation and tropospheric ozone
(c) increasing levels of atmospheric CO2 which produce the greenhouse effect
(d) ultraviolet radiation (240 -260 nanometers wavelength) and the fumes from the heavily polluted Yamuna river.

Ans: (b)

Q16. Which one of the following regions of India is now regarded as an „ecological hot spot'?
(a) Western Himalayas
(b) Eastern Himalayas
(c) Western ghats

(d) Eastern ghats

Ans: (c)

Q17. Consider the following programmes:
1. Afforestation and development of wast e-lands.
2. Reforestation and replantation in existing forests.
3. Encouraging the wood substitutes and su p-plying other types of fuel.
4. Promotion of wide use of insecticides and pesticides to restrict the loss of forest area from degradation caused by pests and insects.
The National Forest Policy of 1988 includes
(a) 1, 2, 3 and 4
(b) 2 and 4
(c) 1, 3 and 4
(d) 1, 2 and 3

Ans: (d)

Q18. Consider the following statements:
Most international agencies which fund deve l-opment programmes in India on intergover n-mental bilateral agreements, mainly provide
1. Technical assistance.
2. Soft loans which are required to be paid back with interest.
3. Grants, not required to be paid back.
4. Food assistance to alleviate poverty.
Of these statements
(a) 2 and 4 are correct
(b) 1, 2 and 3 are correct
(c) 1, 2 and 4 are correct
(d) 3 and 4 are correct

Ans: (b)

Q19. Indonesian forest fire in 1997 was caused by
(a) greenhouse effect
(b) depletion of ozone layer
(c) El Nino effect
(d) None of the above

Ans: (d)

Q20. World Environment Conference to discuss global warming was held in 1997 in
(a) Stockholm
(b) Rio de Janeiro
(c) Paris
(d) Kyoto

Ans: (d)

Q21. A tree species in Mauritius failed to reproduce because of the extinction of a fruit-eating bird. Which one of the following was that bird
(a) Dove
(b) Dodo
(c) Condor
(d) Skua

Ans: (b)

Q22. The minimum land area recommended for forest cover to maintain proper ecolog i-cal balance in India is
(a) 25%
(b) 33%
(c) 43%
(d) 53%

Ans: (b)

Q23. "India has the largest population of the Asian X.
Today, there are just about 20,000 to 25,000 X in their natural habitat spreading across the evergreen forests, dry thorn forests, swamps and grasslands.
Their prime habitats are, however, the moist deciduous forests. The X population in India ranges from North -West India where they are found in the forest divi sions of Dehradun, Bijnor and Nainital districts of UP to the Western Ghats in the states of Karnataka and Kerala and in Tamil Nadu.
In Central India, their population is distributed in southern Bihar and Odisha. In the East, they are seen in North -Bengal, Assam and a few other states." The animal 'X' referred to in this quotation is
(a) Lion
(b) Elephant
(c) Tiger
(d) One-horned rhinoceros

Ans: (b)

Q24. The first marine sanctuary in India, having within its bounds coral reefs, mollu s-

ca, dolphins, tortoises and various kinds of sea birds, has been established in
(a) Sundarbans
(b) Gahirmatha marine sanctuary
(c) Gulf of Kachch
(d) Lakshadweep

Ans: (b)

Q25. Which one of the following legislations does not deal with the protection of env i-ronment?
(a) The Water (Cess) Act, 1977
(b) The Forest (Conservation) Act, 1980
(c) The Public Liability Insurance Act,1991
(d) The Port Laws Amendment Act, 1997

Ans: (c)

Q26. Within biological communities, some species are important in determining the ability of a large number of other species to persist in the community.
Such species are called
(a) Keystone species
(b) Allopatric species
(c) Sympatric species
(d) Threatened species

Ans: (a)

Q27. Consider the following statements r e-garding environment issues of India :
I. Gulf of Mannar is one of the biosphere r e-serves.
II. The Ganga Action Plan, phase II has been merged with the National River Conservation Plan.
III. The National Museum of Natural History at New Delhi imparts Non-Formal education in environment and conservation.
IV. Environmental Information System (E N-VIS) acts as a decentralised information ne t-work for environmental information.
Which of these statements are correct?
(a) I, II and IV
(b) I, II, III and IV
(c) II and III
(d) I, III and IV

Ans: (b)

Q28. A class of animals known as Marsup i-als is a characteristic feature of
(a) Africa
(b) Australia
(c) South America
(d) South-East Asia

Ans: (b)

Q29. Consider the following statements :
1. Kyoto Protocol came into force in the year 2005
2. Kyoto Protocol deals primarily with the d e-pletion of the Ozone layer.
3. Methane as a greenhouse gas is more har m-ful than carbon dioxide Which of the stat e-ments given above is/are correct?
(a) 1 and 2
(b) 1 and 3
(c) 1 Only
(d) 3 Only

Ans: (c)

Q30. Match List-I with List-II and select the correct answer using the codes given below the lists :
List I (National Park/Wild-life Sanctuary)
(a) Bondia Wildlife Sanctuary
(b) Kangerghat National Park
(c) Orang Sanctuary
(d) Ushakothi Wildlife Sanctuary List II (State)
1. Orissa 2. Assam
3. Chhattisgarh 4. Goa
5. Tripura A B C D
(a) 2 1 5 3
(b) 4 3 2 1
(c) 2 3 5 1
(d) 4 1 2 3

Ans: (b)

Q31. Which one of the following is not a B i-osphere Reserve?
(a) Agasthyamalai
(b) Nallamala
(c) Nilgiri
(d) Panchmarhi

Ans: (b)

Q32. Consider the following statements :

1. Silent Valley National Park is in the Nallamala range.
2. Pathrakkadavu Hydroelectric Project is proposed to be built near the Silent Valley National Park.
3. The Kunthi river originates in Silent Valley's rainforests.
Which of the statements given above is/are correct?
(a) 1 and 3
(b) 2 only
(c) 2 and 3
(d) 1, 2 and 3

Ans: (c)

Q33. Which one of the following statements is correct?
(A) The First Meeting of the Parties (MOP 1) to the Cartagena Protocol on Biosafety was held in Philippines in the year 2004.
(B) India is not a signatory to the Biosafety Protocol/ Convention on Biological Diversity.
(C) The Biosafety Protocol deals with genetically modified organisms.
(D) The United States of America is member of the Biosafety Protocol/ Convention on Biological Diversity.
(a) Only A
(b) Only A and B
(c) Only C
(d) All of the above

Ans: (c)

Q34. Match List I with List II and select the correct answer using the code given below the lists :
List-I List-II
(National Park/ (Nearby Town) Wildlife Sanctuary)
A. Chandra Prabha 1. Jaipur
B. Karera 2. Jhansi
C. Jaisamand 3. Agra
D. Nahargarh 4. Varanasi
5. Udaipur A B C D
(a) 4 1 5 2
(b) 5 2 3 1
(c) 4 2 5 1
(d) 5 1 3 2

Ans: (c)

Q35. Which one of the following countries is the first country in the world to propose a carbon tax for its people to the address global warming?
(a) Australia
(b) Germany
(c) Japan
(d) New Zealand

Ans: (d)

Q36. Where is Bundala Biosphere Reserve which has been recently added to the UNESCO's Man and Biosphere (MAB) network, located?
(a) Russia
(b) India
(c) Sri Lanka
(d) Bangladesh

Ans: (c)

Q37. Consider the following statements :
1. In India, Red Panda is naturally found in the Western Himalayas only.
2. In India, Slow Loris lives in the dense forests of the North East.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q38. Which one of the following is located is in the Bastar region?
(a) Bandhavgarh National Park
(b) Dandeli Sanctuary
(c) Rajaji National Park
(d) Indravati National Park

Ans: (d)

Q39. Which one of the following is also known as Top Slip?
(a) Simlipal National Park
(b) Periyar Wilddlife Sanctuary
(c) Manjira Wildlife Sanctuary
(d) Indira Gandhi Wildlife Sanctuary and National Park

Ans: (d)

Q40. Which one among the following has the maximum number of National Parks?
(a) Andaman and Nicobar Islands
(b) Arunachal Pradesh
(c) Assam
(d) Meghalaya

Ans: (a)

Q41. Among the following, which one is not an ape?
(a) Gibbon
(b) Gorilla
(c) Langur
(d) Orangutan

Ans: (c)

Q42. Where was the World Summit on Sustainable Devlopment (Rio+10) held?
(a) Davos
(b) Nova Scotia
(c) Johannesburg
(d) Shanghai

Ans: (c)

Q43. Consider the following statements :
1. Clean Development Mechanism (CDM) in respect of carbon credits in one of the Kyoto Protocol Mechanisms.
2. Under the CDM, the projects handled pertain only to the Annex-I countries.
Which of the statements given above is/are correct?
(a) 1 Only
(b) 2 Only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q44. Out of all the Biosphere Reserves in India. Four have recognized on the World Network by UNESCO.
Which one of the following is not one of them?
(a) Gulf of Mannar
(b) Kanggchenjunga
(c) Nanda Devi
(d) Sundarbans

Ans: (b)

Q45. Consider the following statements :
1. Salt-water crocodile is found in the Andaman and Nicobar Islands.
2. Shrew and papir are found in the Western Ghats of the Malabar region.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q46. Which one of the following is not essentially a species of the Himalayan vegetation?
(a) Juniper
(b) Mahogany
(c) Silver fir
(d) Spruce

Ans: (b)

Q47. Consider the following :
1. Rice fields
2. Coal mining
3. Domestic animals
4. Wetlands Which of the above are sources of methane, a major greenhouse gas ?
(a) 1 and 4 only
(b) 2 and 3 only
(c) 1,2 and 3 only
(d) 1,2,3 and 4

Ans: (d)

Q48. In India, which one of the following States has the largest inland saline wetland?
(a) Gujarat
(b) Haryana
(c) Madhya Pradesh
(d) Rajasthan

Ans: (d)

Q49. Which one of the following Union Ministries implements the Cartagena Protocol on Biosafety?
(a) Ministry of Science and Technology
(b) Ministry of Health and Family Welfare
(c) Ministry of Environment and Forests

(d) Ministry of Chemicals and Fertilizers

Ans: (c)

Q50. The marine animal called dugong which is vulnerable to extinction is :

(a) Amphibian
(b) Bony fish
(c) Shark
(d) Mammal

Ans: (d)

Q51. Consider the following regions :

1. Eastern Himalayas 2 Eastern Mediterranean region
3. North-western Australia Which of the above is/are Biodiversity Hotspot (s)?

(a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1,2 and 3

Ans: (b)

Q52. The Panda belongs to the same family as that of

(a) Bear
(b) Cat
(c) Dog
(d) Rabbit

Ans: (a)

Q53. In the contest of Indian wild life, the flying fox is a:

(a) Bat
(b) Kite
(c) Stork
(d) Vulture

Ans: (a)

Q54. The concept of carbon credit originated from which one of the following?

(a) Earth Summit, Rio de Janeiro
(b) Kyoto Protocol
(c) Montreal Protocol
(d) G- 8 Summit, Heiligendamm

Ans: (b)

Q55. In the context of CO2 emission and Global Warming, what is the name of a market driven device under the UNFCCF that allows developing countries to get funds/incentives from the developed countries to adopt better technologies that reduce greenhouse gas emissions?

(a) Carbon Footprint
(b) Carbon Credit Rating
(c) Clean Development Mechanism
(d) Emission Reduction Norm

Ans: (c)

Q56. Consider the following statements :

1. Biodiversity hotspots are located only in tropical regions.
2. India has four biodiversity hotspots i.e., Eastern Himalayas, Western Himalayas, Western Ghats and Andaman and Nicobar Islands.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q57. Consider the following statements :

1. The boundaries of a National Park are defined by legislation.
2. A Biosphere Reserve is declared to conserve a few specific species of flora and fauna.
3. In a Wildlife Sanctuary, limited biotic interference is permitted.

Which of the statements given above is/are correct?

(a) 1 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q58. The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty drawn at

(a) United Nations Conference on the Human Environment, Stockholm, 1972
(b) UN Conference on Environment and Development, Rio de Janeiro, 1992
(c) World Summit on Sustainable Development, Johannesburg, 2002

(d) UN Climate Change Conference, Copenhagen,

Ans: (b)

Q59. India is a party to the Ramsar Convention and has declared many areas as Ramsar Sites. Which of the following statements best describes as to how we should maintain these sites in the context of this Convention ?

(a) Keep all the sites completely inaccessible to man so that they will not be exploited

(b) Conserve all the sites through ecosystem approach and permit tourism and recreation only

(c) Conserve all the sites through ecosystem approach for a period without any exploitation, with specific criteria and specific period for each site, and then allow sustainable use of them by future generations

(d) Conserve all the sites through ecosystem approach and allow their simultaneous sustainable use.

Ans: (c)

Q60. Other than Jatropha curcas, why is Pongamia pinnata also considered a good option for the production of bio - diesel in India?

1. Pongamia pinnata grows naturally in most of the arid regions of India.
2. The seeds of Pongamia pinnata are rich in lipid content of which nearly half is oleic acid.

Which of the statements given above is /are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q61. Due to their extensive rice cultivation, some regions may be contributing to global warming. To what possible reason/reasons is this attributable?

1. The anaerobic conditions associated with rice cultivation cause the emission of methane.
2. When nitrogen based fertilizers are used, nitrous oxide is emitted from the cultivated soil.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q62. Given below are the names of four energy crops.

Which one of them can be cultivated for ethanol?

(a) Jatropha
(b) Maize
(c) Pongamia
(d) Sunflower

Ans: (b)

Q63. Consider the following pairs :

Protected area Well known for

1. Bhiterkanika, Water Crocodile Orissa Salt
2. Desert National Park, Rajasthan Great Indian Bustard
3. Eravikulam, Kerala Hoolock Gibbon Which of the pairs given above is/are correctly matched ?

(a) 1 only
(b) 1 and 2 only
(c) 2 only
(d) 1, 2 and 3

Ans: (b)

Q64. Consider the following statements :

1. The Taxus tree naturally found in the Himalayas.
2. The Taxus tree is listed in the Red Data Book.
3. A drug called "taxol" is obtained from Taxus tree is effective against, Parkinson's disease.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q65. What are the possible limitations of India in mitigating the global warming at present and in the immediate future?
1. Appropriate alternate technologies are not sufficiently available.
2. India cannot invest huge funds in research and development.
3. Many developed co untries- have already set up their polluting industries in India.
Which of the statements given above is/are correct?
(a) 1 and 2 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q66. Consider the following which can be found in the ambient atmosphere :
1. Soot
2. Sulphur hexafluoride
3. Water vapour Which of the above contribute to the warming up of the atmosphere?
(a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q67. Biodiversity forms the basis for human existence in the following ways:
1. Soil formation
2. Prevention of soil erosion
3. Recycling of waste
4. Pollination of crops Select the correct a nswer using the codes given below :
(a) 1, 2 and 3 only
(b) 2,3 and 4 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4 only.

Ans: (d)

Q68. Which one of the following is not a site for in-situ method of conservation of flora ?
(a) Biosphere reserve
(b) Botanical garden
(c) National park
(d) Wildlife sanctuary.

Ans: (b)

Q69. Two important rivers - one with its source in Jharkhand (and known by a di f-ferent name in Odisha), and another, with its source in Odisha- merge at a place only a short distance from the coast of Bay of Be n-gal before flowing into the sea. This is an important site of wildlife and biodiversity and a protected area.
Which one of the following could be this?
(a) Bhitarkanika
(b) Chandipur-on-sea
(c) Gopalpur-on-sea
(d) Simlipal

Ans: (a)

Q70. Consider the following :
1. Carbon dioxide
2. Oxides of nitrogen
3. Oxides of Sulphur Which of the above is/are the emission/emissions from coal combustion at thermal power plants?
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1,2,and 3

Ans: (b)

Q71. The formation of ozone hole in the Antarctic region has been a cause of co n-cern. What could be the reason for the for-mation of this hole?
(a) Presence of prominent tropo -spheric turbu-lence; and inflow of chlorofluorocarbons.
(b) Presence of prominent polar front and stratospheric clouds; and inflow of chlor o-fluorocarbons.
(c) Absence of polar front and stratospheric clouds; and inflow of methane and chlor o-fluorocarbons.
(d) Increased temperature at polar region due to global warming.

Ans: (b)

Q72. Consider the following :
1. Photosynthesis 2. Respiration
3. Decay of organic matter 4. Volcanic action.

Which of the above add carbon dioxide to the carbon cycle on earth?
(a) 1 and 4 only
(b) 2 and 3 only
(c) 2, 3 and 4 only
(d) 1,2,3 and 4

Ans: (c)

Q73. Regarding "carbon credits", which one of the following statements is not correct?
(a) The carbon credit system was ratified in conjunction with the Kyoto protocol.
(b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota.
(c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission.
(d) Carbon credits are traded at a price fixed from time to time by the United Nations env i-ronment programs.

Ans: (d)

Q74. A sandy and saline area is the natural habitat of an Indian animal species. The a n-imal has no predators in that area but its existence is threatened due to the destru c-tion of its habitat. Which one of the follo w-ing could be that animal?
(a) Indian wild buffalo
(b) Indian wild ass
(c) Indian wild boar
(d) Indian gazelle

Ans: (b)

Q75. The 2004 Tsunami made people realize that mangroves can serve as a reliable safety hedge against coastal calamities. How do mangroves function as a safety hedge?
(a) The mangrove swamps separate the human settlements from the sea by a wide zone in which people neither live nor venture out.
(b) The mangroves provide both food and medicines which people are in need of after any natural disaster.
(c) The mangrove trees are tall with dense canopies and serve as an excellent shelter du r-ing a cyclone or Tsunami.
(d) The mangrove trees do not get uprooted by storms and tides because of their extensive roots.

Ans: (d)

Q76. The "Red Books" published by the I n-ternational Union for Conservation of N a-ture and Natural Resources (IUCN) contain lists of ?
1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.
Select the correct answer using the codes given below:
(a) 1 and 3
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q77. Three of the following criteria have contributed to the recognition of Western Ghats , Sri Lanka and Indo-Burma regions as hotspots of biodiversity :
1. Species richness
2. Vegetation density
3. Endemism
4. Ethno-botanical importance
5. Threat perception
6. Adaption of flora and fauna to warm and humid conditions Which three of the above are correct criteria in this context?
(a) 1,2, and 6.
(b) 2,4 and 6.
(c) 1,3 and 5.
(d) 3,4 and 6.

Ans: (c)

Q78. Human activities in the recent past have caused the increased concentration of carbon dioxide in the atmosphere, but a lot of it does not remain in the lower atmos-phere because of
1. Its escape into the outer stratosphere.
2. The photosynthesis by phytoplankton in the oceans.
3. The trapping of air in the polar ice caps.

Which of the statements given above is/are correct?
(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q79. If a tropical rain forest is removed, it does not regenerate quickly as compared to a tropical deciduous forest. This is because
(a) The soil of rain forest is deficient in nutr i-ents.
(b) Propagules of the trees in a rain forest have poor viability.
(c) The rain forest species are slow-growing.
(d) Exotic species invade the fertile soil of rain forest.

Ans: (a)

Q80. The Himalayan Range is very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon?
(a) It has a high rainfall that supports luxuriant vegetative growth.
(b) It is a confluence of different bio - geographical zones.
(c) Exotic and invasive species have not been invasive species have not been introduced in this region
(d) It has less human interference.

Ans: (b)

Q81. With reference to India, consider the following Central Acts:
1. Import and Export (Control) Act, 1947.
2. Mining, and Mineral Development (Regul a-tion) Act, 1957.
3. Customs Act, 1962
4. Indian Forest Act, 1927.
Which of the above acts have relevance to/bearing on the biodiversity conservation in the country?
(a) 1 and 3 only
(b) 2,3 and 4 only
(c) 1,2,3 and 4
(d) None of the above acts

Ans: (c)

Q82. Consider the following statements :
1. Biodiversity is normally greater in the lower latitudes as compared to higher latitudes
2. Along the mountain gradients, biodiversity is normally greater in the lower altitudes as compared to the higher altitudes.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2.

Ans: (c)

Q83. In the context of ecosystem productiv i-ty, marine upwelling zones are important as they increase the marine productivity by bringing the
1. Decomposer microorganisms to the surface.
2. Nutrients to the surface.
3. Bottom-dwelling organisms to the surface.
Which of the statements given above is/are correct?
(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only.

Ans: (c)

Q84. Consider the following protected ar e-as:
1. Bandipur 2. Bhitarkanika
3. Manas 4. Sundarbans Which of the above are declared Tiger Reserves?
(a) 1 and 2 only
(b) 1, 3 and 4 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (b)

Q85. In which one among the following ca t-egories of protected areas in India are local people not allowed to collect and use the b i-omass?
(a) Biosphere reserves
(b) National parks
(c) Wetlands declared under Ramsar conve n-tion

(d) Wildlife sanctuaries

Ans: (b)

Q86. Which one of the following groups of animals belongs to the category of enda ngered species?

(a) Great Indian bustard, Musk Deer, Red Panda and Asiatic Wild Ass

(b) Kashmir Stag, Cheetah, Blue Bull, Great Indian Bustard

(c) Snow Leopard, Swamp Deer, Rhesus Monkey, Saras (Crane)

(d) Lion Tailed Macaque, Blue Bull, Hanuman Langur, Cheetah

Ans: (a)

Q87. The Millenium Ecosystem Assessment describes the following major categories of ecosystem servicesprovisioning, supporting, regulating, preserving and cultural. Which one of the following is supporting service?

(a) Production of food and water

(b) Control of climate and disease

(c) Nutrient Cycling and crop pollinator

(d) Maintenance of diversity

Ans: (c)

Q88. What is the difference between the antelopes Oryx and Chiru?

(a) Oryx is adapted to live in hot and arid areas whereas Chiru is adapted to live in steppes and semi-desert areas of cold high mountains

(b) Oryx is poached for its antlers whereas Chiru is poached for its musk

(c) Oryx exists in western India only whereas Chiru exists in north east India only.

(d) None of the statements (a), (b) and (c) given above is correct.

Ans: (a)

Q89. Which of the following can be threats to the biodiversity of a geographical area?

1. Global warming
2. Fragmentation of habitat
3. Invasion of alien species
4. Promotion of vegetarianism Select the correct answer using the codes given below:

(a) 1, 2 and 3 only

(b) 2 and 3 only

(c) 1 and 4 only

(d) 1, 2, 3 and 4

Ans: (a)

Q90. Consider the following :

1. Black necked crane 2. Cheetah
3. Flying squirrel 4. Snow leopard Which of the above are naturally found in India?

(a) 1, 2 and 3 only

(b) 1,3 and 4 only

(c) 2 and 4 only

(d) 1, 2,3 and 4

Ans: (b)

Q91. Vultures used to be very common in Indian countryside some years ago are rarely seen nowadays.

This is attributed to

(a) the destruction of their nesting sites by new invasive species

(b) a drug used by cattle owners for treating their diseased cattle

(c) scarcity of food available to them

(d) a widespread, persistant and fatal disease among them

Ans: (b)

Q92. How does National Biodiversity Authority (NBA) help in protecting the Indian agriculture?

1. NBA checks the biopiracy and protects the indigenous and traditional genetic resources.
2. NBA directly monitors and supervises the scientific research on genetic modification of crop plants.
3. Applications for intellectual property rights related to genetic/ biological resources cannot be made without the approval of NBA.

Which of the statements given above is/ are correct?

(a) 1 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1,2 and 3

Ans: (c)

Q93. If National Water Mission is properly and completely implemented how will it impact the country?

1. Part of the water needs of urban areas will be met through recycling of waste water.
2. The water requirements of coastal cities with inadequate alternative sources of water will be met by adopting appropriate technologies that allow for the use of ocean water.
3. All the rivers of Himalayan origin will be linked to the rivers of peninsular India.
4. The expenses incurred by farmers for digging bore wells and for installing motors and pump sets to draw groundwater will be completely reimbursed by the Government.
Select the correct answer using the codes given below
(a) 1 only
(b) 1 and 2 only
(c) 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (b)

Q94. Consider the following statements:
Chlorofluorocarbons, known as ozone depleting substances are used
1. In the production of plastic foams
2. in the production of tubeless tyres
3. In cleaning certain electronic components
4. As pressurizing agents in aerosol cans
Which of the statements given above is/are correct?
(a) 1,2 and 3 only
(b) 4 only
(c) 1, 3 and 4 only
(d) 1, 2,3 and 4

Ans: (d)

Q95. With reference to the wetlands of India, consider the following statements:
1. The country's total geographical area under the category of wetlands is recorded more in Gujarat as compared to other states.
2. In India, the total geographical area of coastal wetlands is larger than that of inland wetlands.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q96. Consider the following :
1. Star tortoise 2. Monitor lizard
3. Pygmy hog 4. Spider monkey Which of the above found in India?
(a) 1, 2 and 3 only
(b) 2 and 3 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4

Ans: (a)

Q97. Consider the following animals:
1. Sea cow 2. Sea horse
3. Sea lion Which of the above is/are mammal/mammals?
(a) 1 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q98. Consider the following pairs:
1. Nokrek Biosphere Reserve : Garo Hills
2. Logtak (Loktak) Lake : Barail Range
3. Namdapha National Park : Dafla Hills
Which of the above pairs is/are correctly matched?
(a) 1 only
(b) 2 and 3 only
(c) 1, 2 and 3
(d) None

Ans: (a)

Q99. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity?
(a) Oceans, lakes, grasslands, mangroves
(b) Mangroves, oceans, grasslands, lakes
(c) Mangroves, grasslands, lakes, oceans
(d) Oceans, mangroves, lakes, grasslands

Ans: (c)

Q100. Due to improper / indiscriminate disposal of old and used computers or their parts, which of the following are released into the environment as ewaste?
1. Beryllium 2. Cadmium
3. Chromium 4. Heptachlor

5. Mercury 6. Lead
7. Plutonium Select the correct answer using the codes given below.
(a) 1, 3, 4, 6 and 7 only
(b) 1, 2, 3,5 and 6 only
(c) 2, 4, 5 and 7 only
(d) 1, 2, 3, 4, 5, 6 and 7

Ans: (b)

Q101. Acid rain is caused by the pollution of environment by
(a) carbon dioxide and nitrogen
(b) carbon monoxide and carbon dioxide
(c) ozone and carbon dioxide
(d) nitrous oxide and sulphur dioxide

Ans: (d)

Q102. With reference to food chains in ec o-systems, consider the following statements :
1. A food chain illustrates the order in which a chain of organisms feed upon each other.
2. Food chains are found within the popul a-tions of a species.
3. A food chain illustrates the numbers of each organism which are eaten by others.
Which of the statements given above is / are correct?
(a) 1 only
(b) 1 and 2 only
(c) 1, 2 and 3
(d) None

Ans: (a)

Q103. Consider the following organisms :
1. Agaricus 2. Nostoc
3. Spirogyra Which of the above is / are used as biofertilizer / biofertilizers
(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (a)

Q104. Which of the following adds / add nitrogen to the soil?
1. Excretion of urea by animals
2. Burning of coal by man
3. Death of vegetation Select the correct a n-swer using the codes given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q105. In which of the following States is lion-tailed macaque found in its natural habitat?
1. Tamil Nadu 2. Kerala
3. Karnataka 4. Andhra Pradesh Select the co r-rect answer using the codes given below.
(a) 1, 2 and 3 only
(b) 2 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (a)

Q106. Which one of the following terms d e-scribes not only the physical space occupied by an organism but also its functional role in the community of organisms?
(a) Ecotone
(b) Ecological niche
(c) Habitat
(d) Home range

Ans: (b)

Q107. Photochemical smog is a resultant of the reaction among
(a) NO2, O3 and peroxyacetyl nitrate in the presence of sunlight
(b) CO, O2 and peroxyacetyl nitrate in the presence of sunlight
(c) CO, CO2 and NO2 at low temperature
(d) High concentration of NO2, O3 and CO in the evening

Ans: (a)

Q108. With reference to the food chains in ecosystems, which of the following kinds of organism is / are known as decomposer o r-ganism/organisms?
1. Virus 2. Fungi
3. Bacteria Select the correct answer using the codes given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (b)

Q109. Consider the following fauna of India :

1. Gharial
2. Leatherback turtle
3. Swamp deer Which of the above is/are endangered?

(a) 1 and 2 only
(b) 3 only
(c) 1, 2 and 3
(d) None

Ans: (c)

Q110. Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/ are correct?

(a) 1 only
(b) 2 and 3 only
(c) 2 only
(d) 1, 2 and 3

Ans: (b)

Q111. With reference to „Eco -Sensitive Zones', which of the following statements is/are correct?

1. Eco -Sensitive Zones are the areas that are declared under the Wildlife (Protection) Act, 1972.
2. The purpose of the declaration of Eco -Sensitive Zones is to prohibit all kinds of human activities in those zones except agriculture.

Select the correct answer using the code given below.

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (d)

Q112. Consider the following pairs :

Wetlands Confluence of rivers

1. Harike Wetlands : Confluence of Beas and Satluj/Sutlej
2. Keoladeo Ghana Confluence of Banas National Park : and Chambal
3. Kolleru Lake : Confluence of Musi and Krishna Which of the above pairs is/are correctly matched?

(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q113. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of

(a) biosphere reserves
(b) botanical gardens
(c) national parks
(d) wildlife sanctuaries

Ans: (a)

Q114. The scientific view is that the increase in global temperature should not exceed 2 °C above preindustrial level. If the global temperature increases beyond 3 °C above the pre-industrial level, what can be its possible impact/impacts on the world?

1. Terrestrial biosphere tends toward a net carbon source
2. Widespread coral mortality will occur.
3. All the global wetlands will permanently disappear.
4. Cultivation of cereals will not be possible anywhere in the world.

Select the correct answer using the code given below.

(a) 1 only
(b) 1 and 2 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (b)

Q115. If you travel through the Himalayas, you are likely to see which of the following plants naturally growing there?

1. Oak 2. Rhododendron
3. Sandalwood Select the correct answer using the code given below
(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q116. Which of the following are some i m-portant pollutants released by steel industry in India?
1. Oxides of sulphur 2. Oxides of nitrogen
3. Carbon monoxide 4. Carbon dioxide Select the correct answer using the code given below.
(a) 1, 3 and 4 only
(b) 2 and 3 only
(c) 1 and 4 only
(d) 1,2, 3 and 4

Ans: (d)

Q117. With reference to Neem tree, consi d-er the following statements :
1. Neem oil can be used as a pesticide to co n-trol the proliferation of some species of insects and mites.
2. Neem seeds are used in the manufacture of biofuels and hospital detergents.
3. Neem oil has applications in pharmaceutical industry.
Which of the statements given above is/are correct?
(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q118. Consider the following international agreements :
1. The International Treaty on Plant Genetic Resources for Food and Agriculture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention Which of the above has / have a bearing on the biodive r-sity?
(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q119. Consider the following statements regarding 'Earth Hour':
1. It is an initiative of UNEP and UNESCO.
2. It is a movement in which the participants switch off the lights for one hour on a certain day every year.
3. It is a movement to raise the awareness about the climate change and the need to save the planet.
Which of the statements given above is / are correct?
(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q120. Which one of the following is the co r-rect sequence of a food chain?
(a) Diatoms-Crustaceans-Herrings
(b) Crustaceans-Diatoms-Herrings
(c) Diatoms-Herrings-Crustaceans
(d) Crustaceans-Herrings-Diatoms

Ans: (a)

Q121. If a wetland of international i m-portance is brought under the „Montreux Record', what does it imply?
(a) Changes in ecological character have o c-curred, are occurring or are likely to occur in the wetland as a result of human interference.
(b) The country in which the wetland is located should enact a law to prohibit any human a c-tivity within five kilo metres from the edge of the wetland
(c) The survival of the wetland depends on the cultural practices and trad itions of certain communities living in its vicinity and therefore the cultural diversity therein should not be d e-stroyed
(d) It is given the status of 'World Heritage Site'

Ans: (a)

Q122. With reference to „Global Enviro n-ment Facility', which of the following stat e-ments is/are correct?
(a) It serves as financial mechanism for 'Con-vention on Biological Diversity' and 'United Nations Framework Convention on Climate Change'
(b) It undertakes scientific research on env i-ronmental issues at global level
(c) It is an agency under OECD to facilitate the transfer of technology and funds to underd e-veloped countries with specific aim to protect their environment.
(d) Both *(a)* and *(b)*

Ans: (a)

Q123. Consider the following pairs
1. Dampa Tiger Reserve : Mizoram
2. Gumti Wildlife Sanctuary : Sikkim
3. Saramati Peak : Nagaland Which of the above pairs is /are correctly matched?
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q124. With reference to a conservation o r-ganization called Wetlands International', which of the following statements is/are co r-rect?
1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
2. It works at the field level to develop and mobilize knowledge, and use the practical e x-perience to advocate for better policies.
Select the correct answer using the code given below.
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q125. Other than poaching, what are the possible reasons for the decline in the pop u-lation of Ganges River Dolphins?
1. Construction of dams and barrages on rivers
2. Increase in the population of crocodiles in rivers
3. Getting trapped in fishing nets accidentally
4. Use of synthetic fertilizers and other agricul-tural chemicals in crop-fields in the vicinity of rivers Select the correct answer using the code given below.
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4

Ans: (c)

Q126. Brominated flame retardants are used in many household products like ma t-tresses and upholstery.
Why is there some concern about their use?
1. They are highly resistant to degradation in the environment.
2. They are able to accumulate in humans and animals.
Select the correct answer using the code given below :
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (c)

Q127. Which of the following adds/add ca r-bon dioxide to the carbon cycle on the pla n-et Earth?
1. Volcanic action
2. Respiration
3. Photosynthesis
4. Decay of organic matter Select the correct answer using the code given below.
(a) 1 and 3 only
(b) 2 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (c)

Q128. If you walk through countryside, you are likely to see some birds stalking alon g-side the cattle to seize the insects, disturbed by their movement through grasses.
Which of the following is/are such bird/birds?
1. Painted Stork

2. Common Myna
3. Black -necked Crane Select the correct a n-swer using the code given below.
(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (b)

Q129. Which one of the following National Parks has a climate that varies from trop i-cal to subtropical, temperate and arctic?
(a) Khangchendzonga National park
(b) Nandadevi National Park
(c) Neora Valley National Park
(d) Namdapha National park

Ans: (d)

Q130. „Bio Carbon Fund Initiative for Su s-tainable Forest Landscapes' is managed by the
(a) Asian Development Bank
(b) International Monetary Fund
(c) United Nations Environment Programme
(d) World Bank

Ans: (d)

Q131. With reference to „Forest Carbon Partnership Facility', which of the following statements is/are correct?
1. It is global partnership of governments, businesses, civil society and indigenous pe o-ples
2. It provides financial aid to universities, ind i-vidual scientists and institutions invol ved in scientific forestry research to develop eco - friendly and climate adaptation technologies for sustainable forest management
3. It assists the countries in their 'REDD+ (Re-ducing Emission from Deforestation and Fo r-est Degradation+)' efforts by providi ng them with financial and technical assistance.
Select the correct answer using the code given below
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q132. With reference to an organization known as 'Birdlife International' which of the following statements is/ are correct?
1. It is a Global Partnership of Conservation Organizations.
2. The concept of 'biodiversity hotspots' origi-nated from this organization.
3. It identifies the sites known/referred to as 'Important Bird and Biodiversity Areas'.
Select the correct answer using the code given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q133. Which one of the following is the best description of the term "ecosystem"?
(a) A community of organisms interacting with one another
(b) That part of the Earth which is inhabited by living organisms
(c) A community of organisms together with the environment in which they live.
(d) The flora and fauna of a geographical area.

Ans: (c)

Q134. Which of the following National Parks is unique in being a swamp with float-ing vegetation that supports a rich biodive r-sity?
(a) Bhitarkanika National Park
(b) KeibulLamjao National Park
(c) Keoladeo Ghana National park
(d) Sultanpur National park

Ans: (b)

Q135. With reference to the International Union for Conservation of Nature and Na t-ural Resources
(IUCN) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora
(CITES), which of the following statements is/are correct?

1. IUCN is an organ of the United Nations and CITES is an international agreement between governments
2. IUCN runs thousands of field projects around the world to better manage natural e n-vironments.
3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws.
Select the correct answer using the code given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q136. With reference to „ dugong', a mammal found in India, which of the following statements is/are correct?
1. It is a herbivorous marine animal.
2. It is found along the entire coast of India
3. It is given legal protection under Schedule I of the Wildlife (Protection) Act, 1972.
Select the correct answer using the code given below.
(a) 1 and 2
(b) 2 only
(c) 1 and 3
(d) 3 only

Ans: (c)

Q137. What is Rio+20 Conference, often mentioned in the news?
(a) It is the United nations Conference on Su s-tainable Development
(b) It is a Ministerial Meeting of the World Trade Organization
(c) It is a Conference of the Inter-governmental Panel on Climate Change
(d) It is a Conference of the Member Countries of the Convention on Biological Diversity

Ans: (a)

Q138. Which one of th e following is assoc i-ated with the issue of control and phasing out of the use of ozonedepleting substances?
(a) Bretton Woods Conference
(b) Montreal Protocol
(c) Kyoto Protocol
(d) Nagoya Protocol

Ans: (b)

Q139. Which of the following statements regarding 'Green Climate Fund' is/are correct?
1. It is intended to assist the developing cou n-tries in adaptation and mitigation practices to counter climate change.
2. It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank.
Select the correct answer using the code given below.
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q140. The term Intended Nationally D e-termined Contribution is sometimes seen in the news in the context of :
(a) Pledge made by the European countries to rehabilitate refugees from the war -affected Middle East.
(b) Plan of nation outlined by the countries of the world to combat climate changes.
(c) Capital contributed by the member cou n-tries in the establishment o f Asian Infrastru c-ture Investment Bank.
(d) Plan of action outlined by the countries of the regarding Sustainable Developments Goals.

Ans: (b)

Q141. What is/are the i m-portance/importances of the „United N a-tions Convention to Combat Desertific a-tion?
1. It aims to promote effective action through innovative national programmes and suppor t-ive inter-national partnerships.
2. It has a special/particular focus on South Asia and North Africa regions, and its secretar-iat facilitates the allocation of major portio n of financial resources to these regions.

3. It is committed to bottom -up approach, e n-couraging the participation of local people in combating the desertification.
Select the correct answer using the code given below.
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q142. In which of the following regions of India are you most likely to come across the 'Great Indian Hornbill' in its natural habitat?
(a) Sand deserts of northwest India
(b) Higher Himalayas of Jammu and Kashmir
(c) Salt marshes of western Gujarat
(d) Western Ghats

Ans: (d)

Q143. Which of the following are the key features of „National Ganga River Basin Authority (NGRBA)'?
1. River basin is the unit of planning and ma n-agement.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the State through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.
Select the correct answer using the code given below.
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q144. Consider the following pairs :
Terms sometimes seen in the news Their origin
1. Annex-I Countries : Cartagena Protocol
2. Certified Emissions Reductions : Nagoya Protocol
3. Clean Development Mechanism : Kyoto Protocol Which of the pairs given above is/are correctly matched?
(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3

Ans: (c)

Q145. Which of the following best describe the aim of 'Green India Mission' of the Government of India?
1. Incorporating environment benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'.
2. Launching the second green revolution to enhance agriculture output so as to ensure food security to one and all in the future.
3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures.
Select the correct answer using the code given below:
(a) 1 only
(b) 2 and 3 Only
(c) 3 Only
(d) 1, 2 and 3

Ans: (c)

Q146. What is/are unique about „Kharai camel' a breed found in India?
1. It is capable of swimming up to three kil o-meters in seawater.
2. It survives by grazing on mangroves.
3. It lives in the wild and cannot be domest i-cated.
Selected the correct answer using the code giv-en below:
(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (a)

Q147. With reference to an initiative called „The Economics of Ecosystems and Biod i-versity (TEEB)', which of the following statements is/are correct?
1. It is initiative hosted by UNEP, IMF and World Economic Forum.
2. It is a global initiative that focuses on dra w-ing attention to the economic benefits of biod i-versity.

3. It presents an approach that can help dec i-sion-makers recognize, demonstrate and ca p-ture the value of ecosystems and biodiversity.
Select the correct answer using the code given below:
(a) 1 and 2 only
(b) 3 Only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (c)

Q148. With reference to 'Red Sanders', sometimes seen in the news, consider the following statements:
1. It is a tree species found in a part of South India.
2. It is one of the most important trees in the tropical rain forest areas of South India.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 Only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q149. Recently, our scientists have disco v-ered a new and distinct species of banana plant which attains a height of about 11 m e-tres and has orange -coloured fruit pulp. In which part of India has it been discovered?
(a) Anadaman Islands
(b) Anamalai Forests
(c) Maikala Hills
(d) Tropical rain forest of northeast

Ans: (a)

Q150. Which of following statements is/are correct?
Proper design and effective implementation of UNREDD+ Programme can significantly co n-tribute to
1. Protection of biodiversity
2. Resilience of forest ecosystems
3. Poverty reduction Select the correct answer using the code given below
(a) 1 and 2 only
(b) 3 Only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q151. What is „Greenhouse Gas Protocol?
(a) It is an international accounting tool for government and business leaders to unde r-stand, quantify and manage greenhouse gas emissions
(b) It is an initiative of the United Nations to offer financial incentives to developing cou n-tries to reduce greenhouse gas emissions and to adopt eco-friendly technologies
(c) It is an inter -governments agreement rat i-fied by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022.
(d) It is one of the multi lateral REDD - initiatives hosted by the World Bank.

Ans: (a)

Q152. With reference to 'Agenda 21', some-times seen in the news, consider the follo w-ing statements:
1. It is a global action plan for sustainable d e-velopment.
2. It originated in the World Summit on Su s-tainable Development held in Johannesburg in 2002.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Q153. 'Gadgil Committee Report' and 'Kasturirangan Committee Report', some-times seen in the news, are related to
(a) Constitutional reforms
(b) Ganga Action Plan
(c) Linking of rivers
(d) Protection of Western Ghats

Ans: (d)

Q154. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are co r-rect?

1. The Agreement was signed by all the me m-ber countries of the UN and it will go into e f-fect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2°C or even 1.5°C above pre -industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate US $ 100 billion a year from 2020 to help developing countries to cope with climate change.
Select the correct answer using the code given below.
(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

Q155. Consider the following statements:
1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q156. According to the Wildlife (Protection) Act, 1972, which of the following animals cannot be hunted by any person except u n-der some provisions provided by law?
1. Gharial
2. Indian wild ass
3. Wild buffalo Select the correct answer using the code given below:
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q157. If you want to see gharials in their natural habitat, which one of the following is the best place to visit?
(a) Bhitarkanika Mangroves
(b) Chambal River
(c) Pulicat Lake
(d) Deepor Beel

Ans: (b)

Q158. Consider the following statements:
1. Climate and Clean Air Coalition (CCAC) to Reduce Short Lived Climate Pollutants is a unique initiative of G20 group of countries.
2. The CCAC focuses on methane, black ca r-bon and hydrofluorocarbons.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (b)

Q159. From the ecological point of view, which one of the following assumes i m-portance in being a good link betw een the Eastern Ghats and the Western Ghats?
(a) Sathyamangalam Tiger Reserve
(b) Nallamala Forest
(c) Nagarhole National Park
(d) Seshachalam Biosphere Reserve

Ans: (a)

Q160. In the context of solving pollution problems, what is/are the a d-vantage/advantages of bioremediation tec h-nique?
1. It is a technique for cleaning up pollution by enhancing the same biodegradation process that occurs in nature.
2. Any contaminant with heavy metals such as cadmium and lead can be readily and co m-pletely treated by bioremediation using micr o-organisms.
3. Genetic engineering can be used to create microorganisms specifically designed for bi o-remediation.
Select the correct answer using the code given below:

(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q161. Due to some reasons, if there is a huge fall in the population of species of butterflies, what could be its likely consequence/consequences?
1. Pollination of some plants could be adversely affected.
2. There could be a drastic increase in the fungal infections of some cultivated plants.
3. It could lead to a fall in the population of some species of wasps, spiders and birds.
Select the correct answer using the code given below:
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q162. In the context of mitigating the impending global warming due to anthropogenic emissions of carbon dioxide, which of the following can be the potential sites for carbon sequestration?
1. Abandoned and uneconomic coal seams
2. Depleted oil and gas reservoirs
3. Subterranean deep saline formations Select the correct answer using the code given below:
(a) 1 and 2 only
(b) 3 only
(c) 1 and 3 only
(d) 1, 2 and 3

Ans: (d)

Q163. In India, if a species of tortoise is declared protected under Schedule I of the Wildlife (Protection) Act, 1972, what does it imply?
(a) It enjoys the same level of protection as the tiger.
(b) It no longer exists in the wild, a few individuals are under captive protection; and now it is impossible to prevent its extinction.
(c) It is endemic to a particular region of India.
(d) Both (b) and (c) stated above are correct in this context.

Ans: (a)

Q164. Recently there was a proposal to translocate some of the lions from their natural habitat in Gujarat to which one of the following sites?
(a) Corbett National Park
(b) Kuno Palpur Wildlife Sanctuary
(c) Mudumalai Wildlife Sanctuary
(d) Sariska National Park

Ans: (b)