RAVI MATHS TUITION CENTRE , WHATSAPP - 8056206308

Time : 1 Mins **ENVIRONMENTAL ISSUES 1** **Marks : 1057**

1. High concentration of greenhouse gases has resulted in maximum rise of atmospheric temperature in
   a) tropic region b) middle latitude c) polar region d) temperate region
2. Green muffler scheme helps to reduce
   a) air pollution b) noise pollution c) e-wastes d) both (a) and (b).
3. Depletion of which gas in the atmosphere can lead to an increased incidence of skin cancers?
   a) Methane b) Nitrous oxide c) Ozone d) Ammonia
4. Eutrophication is often seen in _____.
   a) deserts b) fresh water lakes c) ocean d) mountains
5. The amount of biodegradable organic matter in sewage water can be estimated by measuring:
   a) biochemical oxygen demand b) the growth of anaerobic bacteria in water
   c) biogeological oxygen demand d) the growth of aerobic bacteria in water
6. Which is not an effect of acidic rain in a pond?
   a) Increased fungal growth b) Decreased insect population
   c) Increased growth of green algae d) NO_3^- & SO_4^{-2} saturation
7. In the event of global warming, which one of the following is most likely to occur?
   a) Existing plant and animal communities will move North in response to warming.
   b)
   Agriculture in the Prairie provinces will be redeveloped on soils of the Canadian Shield.
   c)
   The anticipated rise in sea level will be caused primarily by the melting of polar ice caps.
   d)
   The decomposition of organic matter in the unfrozen surface layer of polar soils will increase.
8. Acid rains are produced by

a) excess NO_x and SO_2 from burning fossil fuels
b) excess production of NH_3 by industries and power plants
c) excess release of carbon monoxide by incomplete combustion of fossil fuels
d) excess release of CO_2 by combustion and animal respiration.

9. DDT residues are rapidly passed through food chain causing biomagnification because DDT is:
a) water soluble b) lipid soluble c) moderately toxic
d) non-toxic to aquatic animals.

10. A sewage treatment process in which a portion of the decomposer bacteria present in the waste is recycled into the beginning of the process, is called _____.
a) cyclic treatment b) primary treatment c) activated sludge treatment
d) tertiary treatment

11. Read the given statements and select the correct option.
Statement 1 : Irrigation without proper drainage of water leads to waterlogging in the soil.
Statement 2 : Waterlogging draws salts to the soil surface, which are deposited as a thin crust on the land surface or start collecting at the roots of the plants.
a) Both statements 1 and 2 are correct.
b) Statement 1 is correct but statement 2 is incorrect.
c) Statement 1 is incorrect but statement 2 is correct.
d) Both statements 1 and 2 are incorrect.

12. 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

13. The controlled aerobic combustion of wastes inside chambers at temperature of 900-1300°C is known as
a) Incineration b) Recycling c) Pyrolysis d) Sanitary dumping

14. High value of BOD (Biochemical Oxygen Demand) indicates that _____.
a) Water is highly Polluted. b) Water is less Polluted.
c) Consumption of organic matter in the water is higher by the microbes.
d) Water is Pure

15. The supersonic jets cause pollution by the thinning of _____.
a) CO_2 layer b) SO_2 layer c) O_2 layer d) O_3 layer

16. Scrubber in the exhaust of a chemical industrial plant removes:

a) Gases like sulphur dioxide
b) Particulate matter of the six 5 micrometre or above
c) Gases like ozone and methane
d) Particulate matter of the size 2.5 micrometre or less

17. Montreal protocol was passed in:
a) 1985 b) 1986 c) 1987 d) 1988

18. Which of the following actions can be taken to control noise pollution?
a) Delimitation of horn-free zone around hospitals and schools
b) Permissible sound-levels of crackers and of loudspeakers
c) Set the timing after which loudspeakers cannot be played d) All of these

19. Which one of the following is not a bioindicator of water pollution?
a) Blood-worms b) Stone flies c) Sewage fungus d) Sludge-worms

20. A river with inflow of domestic sewage rich in organic waste may result:
a) Increased population of aquatic food web organisms
b) Death of fish due to lack of oxygen
c) Drying of the river very soon due to algal bloom
d) Increased population offish due tobiodegradable nutrients

21. Soil fertility is depleted due to
a) Pan breaking b) Terracing c) Intensive agriculture d) Contour Bunding

22. Which of the following is absent in polluted water?
a) Hydrilla b) Water hyacinth c) Larva of stonefly d) Blue-green algae

23. Identify the incorrectly matched pair.
a) Chipko movement - Protection of trees b) Kyoto protocol - Climatic change
c) Montreal protocol - Forest conservation
d) Ramsar convention - Conservation and sustainable utilisation of wetlands

24. Most hazardous metal pollutant of automobile exhausts _____.
a) mercury b) cadmium c) lead d) copper

25. Which of the following is the way to control vehicular air- pollution in Indian cities?
a) Use of CNG as fuel b) Use of unleaded petrol in the vehicles
c) Use of catalytic converter in the vehicles d) All of these

26. Chipko movement was launched for the protection of _____.
a) forests b) livestrock c) wetlands d) grasslands

27. Match the items given in Column I with those in Column II and select the correct option given below:

Column I	**Column II**
(A) Entrophication	(i) UV-Bradiation

(B) Sanitary landfill	(ii) Deforestation
(C) Snow blindness	(iii) Nutrient enrichment
(D) [hum cultivation	(iv) Waste disposal

a)

A	B	C	D
(iii)	(iv)	(i)	(ii)

b)

A	B	C	D
(i)	(iii)	(iv)	(ii)

c)

A	B	C	D
(ii)	(i)	(iii)	(iv)

d)

A	B	C	D
(i)	(ii)	(iv)	(iii)

28. Photochemical Smog possess oxides of
    a) Sulphur b) Nitrogen c) Carbon d) Phosphorus

29. Noise cause
    a) headache by constricting blood vessels of the brain
    b) eye strain by constricting the pupil c) digestive spasms through anxiety
    d) high blood pressure by decreasing cholesterol level in the blood.

30. Which one of the following diseases is not due to contamination of water?
    a) Hepatitis-B b) Jaundice c) Cholera d) Typhoid

31. Presence of E.coli in water indicates
    a) Water is clear b) Water is fully polluted c) Inorganic pollution
    d) Faecal pollution

32. Assertion: Deforestation increases carbon dioxide concentration in the atmosphere.
    Reason: Deforestation may lead to desertification.
    a)
    If both assertion and reason are true and reason is the correct explanation of assertion
    b)
    If both assertion and reason are true but reason is not the correct explanation of assertion
    c) If assertion is true but reason is false. d) If both assertion and reason are false

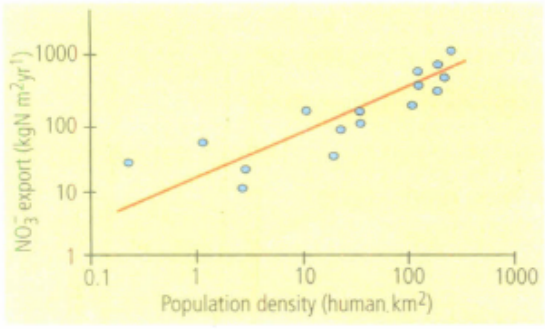
33. Which of the following is the most important cause for animals and plants being driven to extinction?
    a) Drought and floods b) Economic exploitation c) Alien species invasion
    d) Habitat loss and fragmentation

34. Release of phosphates and nitrates in water bodies (i.e., in rivers and lakes) leads to
    a) Biomagnification b) Reduced algal growth c) Increased algal growth
    d) Increased growth of decomposers

35. Which of the following is not used for disinfection of drinking water?

a) Chlorine b) Ozone c) Chloramine d) Phenyl

36. The given graph shows how much nitrate (NO_3^-]) is exported from the continent towards the ocean by 16 major rivers in the world compared to the density of human populations living along those drainage basins (i.e., along these rivers). What interpretation can be drawn from this graph?



a)
Nitrate exported through rivers from heavily populated cities can cause eutrophication and toxic algal bloom in marine coastal regions.
b) Small drainage basins export more NO_3^-
c) Drainage basins with higher population densities export lesser NO_3^-
d) Both (a) and (c)

37. Photochemical smog
a) Heat emission due to bomb explosion
b) Production of useful ecological effect by a previously useful chemical
c) Formation of secondary pollutant from reaction of primary pollutants
d) Production of adverse ecological effect by a previously useful chemical

38. Peroxyacyl nitrates (PAN) are formed through photo - photochemical reactions between
a) sulphur oxides and hydrocarbons b) nitrogen oxides and hydrocarbons
c) nitrogen oxides and O_3 d) $CFCl_3$ and O_3'

39. Measuring Biochemical Oxygen Demand (BOD) is a method used for _____.
a) estimating the amount of organic matter in sewage water.
b) working out the efficiency of oil driven automobile engines.
c)
measuring the activity of Saccharomyces cerevisae in producing curd on commercial scale.
d) working out the efficiency of RBCs about their capacity to carry oxygen.

40. Read the given statements and select the correct option.
Statement 1 : Traffic jams are likely to cause giddiness, exhaustion, reduced vision, etc.

Statement 2 : Carbon monoxide from vehicles causes these problems by reducing Orcarrying capacity of haemoglobin.

a) Both statements 1 and 2 are correct

b) Statement 1 is correct but statement 2 is incorrect.

c) Statement 1 is incorrect but statement 2 is correct.

d) Both statements 1 and 2 are incorrect.

41. Which one of the following is a wrong statement?
    a) Most of the forests have been lost in tropical areas.
    b) Ozone in upper part of atmosphere is harmful to animals.
    c) Greenhouse effect is a natural phenomengn.
    d) Eutrophication is anatural phenomenon in freshwater bodies
42. Which one of the following organism is used as indicator of water quality?
    a) Beggiatoa b) Chlorella c) Azospirillum d) Escherichia
43. Assertion: Bharat stage IV emission norms have been in place since April 2010, for 4 wheelers in 13 mega cities of India.
    Reason: Green muffler scheme refers to the plantation of trees and shrubs along road sides and is effective to control noise pollution only.
    a)
    If both assertion and reason are true and reason is the correct explanation of assertion.
    b)
    If both assertion and reason are true but reason is not the correct explanation of assertion.
    c) If assertion is true but reason is false. d) If both assertion and reason are false.
44. A disease caused by eating fish contaminated by industrial waste, containing mercury compounds, is called as
    a) osteosclerosis b) Hashimoto's disease c) Bright's disease
    d) Minamata disease.
45. In stratosphere, which of the following elements acts as a catalyst in degradation of ozone and release of molecular oxygen
    a) Fe b) Cl c) Carbon d) Oxygen
46. Compressed Natural Gas (CNG) is:
    a) propane b) methane c) ethane d) butane
47. Global agreement in specific control strategies to reduce the release of ozone-depleting substances, was adopted by _____.
    a) the Montreal Protocol. b) the Kyoto Protocol. c) the Menna Convention.
    d) rio de Janeiro Conference.

48. Spraying of pesticide is an example of
    a) Point source water pollution b) Diffuse water pollution c) Both (1) & (2)
    d) Pyrolysis
49. Which important greenhouse gas, other than methane, is being produced from the agricultural fields?
    a) Arsine b) Sulphur dioxide c) Ammonia d) Nitrous oxide
50. Motor vehicles equipped with catalytic converter are advised to use unleaded petrol because
    a) lead is a heavy metal b) lead causes inactivation of catalyst
    c) lead decreases the efficiency of vehicle d) lead increases burning of petrol.
51. Which of the following are the correct approaches to reduce global warming?
    (i) Use of fossil fuels
    (ii) Improving efficiency of energy usage
    (iii) Afforestation
    (iv) Increasing growth of human population
    a) (i) and (ii) b) (ii) and (iii) c) (iii) and (iv) d) (i), (ii) and (iii)
52. Oil spills causes mass scale death of fishes due to
    a) Clogging of gills b) Disruption of food chain c) Non-availability of food
    d) All of these
53. Acoustic zoning is related with
    a) Soil pollution b) Noise pollution c) Water Pollution d) Solid waste
54. Phosphate pollution is brought about by
    a) phosphate rocks b) automobile exhausts c) sewage and phosphate rocks
    d) sewage and agricultural fertilisers.
55. Read and select the incorrect option about desertification.
    a) A desert is created when barren patches of land meet.
    b) Desertification is the result of increasedurbanisation.
    c) Deserts are arid patches of land.
    d) Slash and burn method is one of the major cause of desertification.
56. The most common indicator organism that represents polluted water is _____.
    a) E.coli b) P. typhi c) C. vibrio d) Entamoeba
57. Which of the following is mainly produced by the activity of anaerobic bacteria on sewage?
    a) Laughing gas b) Propane c) Mustard gas d) Marsh gas
58. Which of the following statements is correct?

a) There are working 'Ecosan' toilets in many areas of Kerala and Sri Lanka.

b)
Municipal solid wastes are wastes from homes, offices, stores, schools, hospitals, etc., that are collected and disposed by the municipality.

c)
In a sanitary landfill, wastes are dumped in a depression or trench after compaction and covered with dirt everyday.

d) All of these

59. Which of the following isotopes is most dangerous to human beings?
a) Phosphorus-32 b) Strontium-So c) Caesium-137 d) lodine-131

60. Corrosion of Taj Mahal is due to the conversion of $CaCO_3$ into
a) $CaSO_4$ and $CaNO_3$ b) $Ca(OH)_2$ c) CaO d) All of these

61. _____ is highly hazardous to animal health but on plants this gas does not seen to show adverse effect.
a) CO b) CO_2 c) SO_2 d) NO_2

62. In stratosphere, which one of the foliowing elements acts as a catalyst in degradation of ozone and release of molecular oxygen?
a) Fe b) Cl c) Carbon d) Oxygen

63. Which of the following is not one of the prime health risks associated with greater UV radiation through the atmosphere due to depletion of stratospheric ozone?
a) Reduced Immune System b) Damage to eyes c) Increased liver cancer
d) Increased skin cancer

64. Match correctly the following and choose the correct option.

i	Environment Protection Act	A	1974
ii	Air Prevention and Control of Pollution Act	B	1987
iii	Water Act	C	1986
iv	Amendment of Air Act to include noise	D	1981

a) A -(iii), B-(iv), C-(i), D-(ii) b) A-(i), B-(iii), C-(ii), D-(iv)

c) A-(iv), B-(i), C-(ii), D-(iii) d) A-(iii), B-(iv), C-(ii), D-(i).

65. Which of the following statements are incorrect regarding the Euro II norms?
a) It stipulates that sulphur be controlied at 350 pp min diesel.

b) It stipulates that sulphur be controlled at 150 ppm in petrol.

c) Aromatic hydrocarbons are to be contained at 42% of the concerned fuel.

d) None of these

66. Assertion: Cultural eutrophication is nutrient enrichment of water bodies due to human activities like passage of sewage, industrial effluents, etc.
Reason: The prime contaminants from sewage and industrial effluents are nitrates and phosphates, which act as plant nutrients and overstimulate the growth of algae.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false. d) If both assertion and reason are false.

67. Assertion: Montreal protocol, was signed at Montreal (Canada) in 1987 to control the emission of ozone depleting substances.
Reason: Kyoto protocol, held in Kyoto (Japan) in 1997, has specified the commitments of different countries to mitigate climate change.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion

c) If assertion is true but reason is false. d) If both assertion and reason are false.

68. Which of the following pairs of gases is mainly responsible for green house effect?
a) Oxygen and Nitrogen b) Nitrogen and Sulphur dioxide
c) Carbon dioxide and Methane d) Ozone and Ammonia

69. The expanded form of DDT is
a) dichloro diphenyl trichloroethane b) dichloro diethyl trichloroethane
c) dichloro dipyrydyl trichloroethane d) dichloro diphenyl tetrachloroacetate

70. Which of the following statements is not correct regarding biomagnification?
(i) Mercury accumulated by an organism cannot be metabolised.
(ii) In the process of biomagnification, concentration of DDT is increased at successive trophic levels.
(iii) Accumulation of cadmium can cause thinning of egg shell in birds.
(iv) DDT accumulation is a major cause of reduced population of fish eating birds.
(v) Biomagnification occurs only in aquatic food chain.
a) (i), (iii) and (v) b) (iii) and (iv) c) (iii) and (v) d) (i), (ii) and (iv)

71. Algal blooms impart a distinct colour to water due to

a)
formation of coloured chemicals in watedacilitated by physiological degradation of algae

b) absorption of light by algal cell wall. c) their pigments

d) excretion of coloured substances

72. Which one of the following statements is not valid for aerosols?
a) They are harmful to human health b) They alter rainfall and monsoon patterns
c) They cause increased agricultural productivity
d) They have negative impact on agricultural land

73. The major source of noise pollution, worldwide is due to
a) office equipment b) transport system c) sugar, textile and paper industries
d) oil refineries and thermal power plants.

74. dB is a standard abbreviation used for the quantitative expression of _____.
a) the density of bacteria in a medium b) a particular pollutant
c) the dominant Bacillus in a culture d) a certain pesticide

75. Which of the following statements regarding eutrophication are correct?
(i) Eutrophication is the natural ageing of a lake by nutrient enrichment of its water.
(ii) Pollutants from human activities like effluents from the industries and homes can radically accelerate the aging process of a lake. This phenomenon is called as cultural or accelerated eutrophication.
(iii) The plant nutrients responsible for eutrophication are nitrates and phosphates.
(iv) These phosphates and nitrates accelerate the growth of algae, which utilise oxygen and may deoxygenate the water to kill the fish and other aquatic animals.
a) (i) and (ii) b) (iii) and (iv) c) (i), (ii) and (iii) d) (i), (ii), (iii) and (iv)

76. Minamata disease was caused due to the consumption of:
a) sea food containing lot of cadmium b) fish contaminated with mercury
c) oysters with lots of pesticides d) sea food contaminated with selenium

77. The zone of atmosphere in which the ozone layer is present is called _____.
a) Ionosphere b) Mesosphere c) Stratosphere d) Troposphere

78. More than 7 % of world's freshwater is /contained in _____.
a) polar ice b) glaciers and mountains c) Antarctica d) greenland

79. The major ozone depleting substance out of the following is:
a) CFCs b) O_2 c) nitrogen d) all of these

80. Global agreement to reduce the release of ODS is.
a) Vienna Convention b) Rio de Janeiro Conference c) Kyoto Protocol
d) Montreal Protocol

81. In the human-induced process called acid precipitation, the main biogeochemical cycles that are altered are the _____ cycles and one effect in lakes is to _____ population of nitrifying bacteria.
a) phosphorus and nitrogen, decrease b) nitrogen and sulphur, decrease
c) nitrogen and sulphur, increase d) phosphorus and sulphur, decrease

82. Which among the following is likely to have the highest levels of DDT deposition in its body?
a) Sea gull b) Phytoplankton c) Eel d) Crab

83. Match column I with column II and select the correct option from the given codes.

	Column - I		**Column -II**
A	Catalytic converter	i	Used in industries and power plants
B	Electrostatic precipitator	ii	Used in automobiles
C	Earmuffs	iii	High noise level
D	Land fills	iv	Solid wastes

a) A·(i), B-(ii), C-(iii), D-(iv) b) A-(ii), B-(i), C-(iii), D-(iv)
c) A-(iv), B-(iii), C-(ii), D-(i) d) A-(iii), B-(ii), C-(iv), D-(i)

84. Read the following statements and select the correct ones.
(i) Ahmed Khan, a plastic sack manufacturer of Bangalore, in 1998, developed polyblend, a fine powder of recycled modified plastic.
(ii) In collaboration with RV College of Engineering and Bangalore City Corporation, he proved that the mixture of polyblend and bitumen was better for road carpeting as it had better water repellent property.
(iii) By 2002, more than 40 km roads of Bangalore were laid with the help of Khan's mixture.
(iv) Rag pickers who used to get Rs 0.40 per kg of plastic waste started getting Rs 6.00 from Ahmed Khan.
(v) Innovation like polyblend might help the modern society from being smothered with plastic waste.
a) (i), (ii) and (iii) b) (ii), (iv) and (v) c) (iii), (iv) and (v) d) All of these

85. A dental disease characterised by mottling of teeth is due to the presence of certain chemical element in drinking water. Which of the following is that element?
a) Fluorine b) Boron c) Mercury d) Chlorine

86. Non-biodegradable pollutants are created by
a) nature b) excessive use of resources c) humans d) natural disasters

87. A brief exposure to 150 dB sound may
a) damage ear drums b) cause permanent impairing hearing ability
c) cause temporary impairing hearing ability d) both (a) and (b).

88. Pollutant responsible for causing pheophytization is
    a) SO_2 b) NO_x c) CO_2 d) Aeroallergens
89. Green house gases are
    a) Absorbers of long-wave radiations from earth
    b) Transparent to both solar radiations and longwave radiations from earth
    c) Absorbers of incoming solar radiations for warming the atmosphere
    d) Transparent to emissions from earth for passage into outer space
90. In an area where DDT had been used extensively, the bird population declined significantly due to
    a) Birds stopped laying eggs b) Earthworms disappeared from the area
    c) Many of the birds egg did not hatch
    d) Snakes started feeding extensively on birds
91. Which of the following is referred to as the world's most problematic aquatic weed?
    a) Abelmoschus esculentus b) Eichhornia crassipes
    c) Parthenium hysterophorus d) Planktonic algae
92. Choose the incorrect statement.
    a)
    The Montreal protocol is associated with the control of emission of ozone depleting substances.
    b) Methane and carbon dioxide are greenhouse gases.
    c) Dobson units are used to measure oxygen content.
    d) Use of incinerators is crucial to disposal of hospital wastes.
93. Waterlogging and soil salinity are some of the problems that have come in
    a) Soil erosion b) White revolution c) Green revolution d) Blue revolution.
94. Minamata disease is due to
    a) Oil spill in water b) Arsenic into the atmosphere
    c) Industrial waste having mercury in water d) Organic waste into drinking water
95. Among the following which one causes more indoor chemical pollution?
    a) Burning coal b) Burning cooking gas c) Burning mosquito coil
    d) Room spray
96. Secondary sewage treatment is mainly a _____.
    a) physical process b) mechanical process c) chemical process
    d) biological process
97. Select the correct arrangement of the types of ultraviolet radiations according to the intensity of their effect on human skin.

a) UV-A > UV-B > UV-C b) UV-B > UV-C > UV-A c) UV-C > UV-B > UV-A

d) UV-A > UV-C > UV-B

98. Which one is not a pollutant normally?

a) Hydrocarbons b) Carbon dioxide c) Carbon monoxide d) Sulphur dioxide

99. Which of the following statements are correct?

(i) Benzene hexachloride (BHC) is a non-biodegradable pollutant.

(ii) Anthropogenic air pollutants are natural in origin.

(iii) Carbon monoxide is a primary air pollutant.

(iv) Sulphur dioxide causes brown air effect during traffic congestion in cities.

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

100. The effect of today's radioactive fallout will probably be more harmful to children of future generation than to present day children because

a) infants are more susceptible to radiations

b) susceptibility to radiations increase with age

c) mutated genes are usually recessive d) all of these

101. Consider the following statements (i) - (iv) about organic farming:

(i) Utilizes genetically modified crops like Bt cotton

(ii) Uses only naturally produced inputs like compost

(iii) Does not use pesticides and urea.

(iv) Produces vegetables rich in vitamins and minerals.

Which of the above statements are correct?

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

102. Match column I with column II and select the correct option from the given codes.

	Column - I		**Column - II**
A	Bishnoi community	i	Rajasthan
B	Chipko movement	ii	Reducethe emission of ozone depleting substances
C	Montreal protocol	iii	Garhwal Himalayas
D	Kyoto protocol	iv	Reducethe emission of greenhouse gases

a) A-(i), B-(iii), C-(ii), D-(iv) b) A-(i), B-(iii), C-(iv), D-(ii)

c) A-(iii), B-(i), C-(ii), D-(iv) d) A-(iii), B-(i), C-(iv), D-(ii)

103. A prolonged exposure to noise at 95 dB can produce

a) respiratory trouble b) skin cancer

c) nervous tension and increased blood pressure d) digestive spasm.

104. Match column I with column II and select the correct option from the given codes.

	Column I		**Column II**
A	Mercury	i	Methaemoglobinemia (or Blue baby syndrome)
B	Nitrate	ii	Black foot disease

	Column I		Column II
C	Arsenic	iii	Itai-itai disease
D	Cadmium	iv	Minamata disease

a) A-(iv), B-(i), C-(ii), D-(iii) b) A-(iv), B-(i), C-(iii), D-(ii)

c) A-(ii), B-(iii), C-(i), D-(iv) d) A-(ii), B-(iv), C-(i), D-(iii)

105. Why is it necessary to remove sulphur from petroleum products?
a) To reduce the emission of sulphur dioxide in exhaust fumes.

b) To increase efficiency of automobiles engines.

c) To use sulphur removed from petroleum for commercial purposes.

d) To increase the life span of engine silencers.

106. Increased asthmatic attacks in certain seasons are related to
a) eating fruits preserved in tin containers b) inhalation of seasonal pollen

c) low temperature d) hot and humid environment.

107. Which of the following is correct for infrared radiations?
a) They are long wave radiations. b) The are short wave radiations

c) They are visible radiations d) None of these.

108. In Minamata Bay of Japan, the animals which remained free from Minamata disease, are ____.
a) pigs b) rabbits c) dogs d) cats

109. The concept of Joint Forest Management (JFM) involves
a) conservation of forest and agricultural land by the government

b) conservation of forest and agricultural land by the government

c)
work in close association with the local communities for protecting and managing forests

d) exploitation of beneficial forest products only.

110. BOD in river water:
a) Remains unchanged when algal bloom occurs
b) Increases when sewage gets mixed up with river water
c) Has no relationship with concentration of oxygen in water
d) Give a measure for Salmonella in water

111. Assertion: Contribution of CO_2, CH_4, CFCs and N_2O towards greenhouse effect is respectively 60%, 6%, 14% and 20%.
Reason: Greenhouse gases are radioactively active gases which prevent the short wavelength radiations emitted by earth to escape into space

a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false. d) If both assertion and reason are false.

112. Limit of BOD prescribed by Central Pollution Control Board for the discharge of industrial and municipal wastewaters into natural surface waters is _____.
a) < 10 ppm b) < 100 ppm c) < 30 ppm d) < 3.0 ppm

113. Which of the following can cause DNA damage and mutations in humans?
a) Absorption of UV-A and UV-B b) Absorption of UV-B c) Absorption of UV-A
d) Absorption of UV-A and UV-C

114. In India, Air (Prevention and Control of Pollution) Act came into force in the year 1981, but was amended In the year_____to include _____as an air pollutant.
a) 1990, noise b) 1984, particulate matter c) 1987, PAN d) 1987, noise

115. A lake with an inflow of domestic sewage rich in organic waste may result in
a) drying of the lake very soon due to algal bloom
b) an increased growth of fishes due to lot of nutrients
c) death of fish due to lack of oxygen
d) increased population of aquatic food web organisms.

116. Which one of the following is the correct percentage of the two (out of the total of 4) greenhouse gases that contribute to the total global warming?
a) CFCs 14%, Methane 20% b) CO_2, 40%, CFCs30% c) N_2O6%, $CO_2$86%
d) Methane 20%, N_2O 18%

117. If there was no CO_2 in the earth's atmosphere the temperature of earth's surface would be _____ .
a) same as present b) less than the present c) higher than the present
dependent on the amount of oxygen in the
d) atmosphere

118. Find odd one out w.r.t. e-waste importers
a) India b) Pakistan c) China d) America

119. Assertion: Evencs refers to a scientific method of treating e-wastes in an environment friendly manner.
Reason: Recycling of e-wastes in developed countries often involves manual participation and exposes the workers to toxic substances present in e-wastes.

a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion

c) If assertion is true but reason is false. d) If both assertion and reason are false.

120. Some statements are given below each with one or two blanks. Select the option that correctly fills up the blanks.
(i) High concentration of DDT disturbs_____ in birds, which causes_____.
(ii)_____burns more efficiently as compared to petrol and diesel.
(iii)_____is the natural ageing of a lake which occurs due to accumulation of _____.
(iv)_____reduces the number of organisms which are sensitive to high temperature.
(v) Irreparable computers and other electronic goods are known as _____.
a)
(i) calcium metabolism, thinning of egg shell (ii) CNG (iii) Eutrophication, nitrates and phosphates (iv) Thermal wastewater (v) electronic waste

b)
(i) protein metabolism, thickening of egg shell (ii) CNG (iii) Eutrophication, nitrates and phosphates (iv) Thermal wastewater (v) electronic waste

c)
(i) calcium metabolism, thinning of egg shell (ii) Coal (iii) Biomagnification, nitrates and phosphates (iv) Organic wastewater (v) inorganic waste

d)
(i) calcium metabolism, thickening of egg shell (ii) CNG (iii) Biomagnification, DDT and mercury (iv) Thermal wastewater (v) electronic waste

121. Ozone depletion is occurring widely in
a) troposphere b) stratosphere c) ionosphere d) all of these

122. Formation of ozone hole is maximum over _____.
a) India b) Antarctica c) Europe d) Africa

123. Snow - blindness in Antarctic region is due to _____.
a) High reflection of light from snow b) Damage of retina caused by infra-red rays
c) Freezing of fluids in the eye by low temperature
d) Inflammation of cornea due to high dose of UV-B radiation

124. A location with luxuriant growth of lichens on the trees indicates that the _____.

a) trees are very healthy. b) trees are heavily infested.
c) location is highly polluted. d) location is not polluted

125. Chlorofluorocarbons are air polluting agents which are produced by
a) diesel trucks b) jet planes c) rice fields d) cellphones

126. Assertion: There is a sharp decline in dissolved oxygen downstream from the point of sewage discharge.
Reason: Microorganisms involved in biodegradation of organic matter in the receiving water body consume a lot of oxygen.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.
b)
If both assertion and reason are true but reason is not the correct explanation of assertion
c) If assertion is true but reason is false. d) If both assertion and reason are false.

127. When huge amount of sewage is dumped into a river, its BOD will _____.
a) increase b) decrease c) sharply decrease d) remain unchanged

128. Assertion: A brief exposure to extremely high sound level, 150dB or more generated by take off of a jet plane or rocket, may damage ear drum or dislocate ear ossicles and permanently impair the hearing ability.
Reason: In India, the Air (Prevention and Control of Pollution) Act came into force in 1981, but was amended in 1987 to include noise as an air pollutant.
a)
If both assertion and reason are true and reason is the correct explanation of assertion
b)
If both assertion and reason are true but reason is not the correct explanation of assertion
c) If assertion is true but reason is false. d) If both assertion and reason are false

129. A lake near a village suffered heavy mortality of fishes within a few days. Consider the following reasons for this?
1. Lots of urea and phosphate fertiliser were used in the crops in the vicinity.
2. The area was sprayed with DDT by an aircraft.
3. The lake water turned green and stinky.
4. Phytoplankton populations in the lake declined initially thereby greatly reducing photosynthesis.
Which two of the above were the main causes of fish mortality in the lake?
a) (2) and (3) b) (3) and (4) c) (1) and (3) d) (1) and (2)

130. The major contributor of green-house gases to the atmosphere is _____.
a) Russia b) USA c) Germany d) Brazil

131. Which of the following causes biomagnification?
a) SO_2 b) Mercury c) DDT d) Both (b) and (c)

132. Sewage drained into water bodies kill fishes because _____.
a) excessive carbon dioxide is added to water b) it gives off a bad smell
c) it removes the food eaten by fish
d) it increases competition with fishes for dissolved oxygen

133. Which one of the following statements is wrong in case of Bhopal tragedy?
a) Methyl Isocyanate gas leakage took place.
b) Thousands of human beings died. c) Radioactive fall out engulfed Bhopal.
d) It took place in the night of December 2/3 1984.

134. Prolonged liberal irrigation of agricultural fields is likely to create the problem of _____.
a) Acidity b) Aridity c) Salinity d) Metal toxicity

135. Acid rain is due to
a) O_3, PAN b) Oxides of nitrogen and sulphur c) Green house effect
d) All of these

136. The dB is a standard abbreviation used for the quantitative expression of:
a) A particular pollutant b) The dominant Bacillus in a culture
c) A certain pesticide d) The density of bacteria in a medium

137. In coming years, skin-related disorders will be more common due to _____.
a) air pollution b) use of detergents c) water pollution
d) depletion of ozone layer

138. Readthe given statements and select the correct option.
Statement 1 : Reforestation is the process of restoring a forest that once existed but was removed at some point of time in the past.
Statement 2 : Reforestation may occur naturally in a deforested' area, however it can be speeded up by planting trees with due consideration to biodiversity that earlier existed in that area.
a) Both statements 1 and 2 are correct.
b) Statement 1 is correct but statement 2 is incorrect.
c) Statement 1 is incorrect but statement 2 is correct.
d) Both statements 1 and 2 are incorrect.

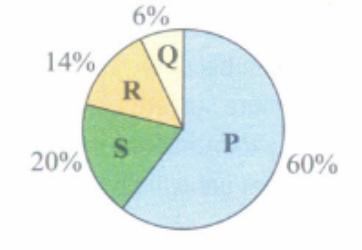
139. Steps taken by the Government of India to control air pollution include _____.

a)
compulsory PUC (pollution Under Control) certification of petrol-driven vehicles which tests for carbon monoxide and hydrocarbons.
b)
permission to use only pure diesel with a maximum of 500 ppm sulphur as fuel for vehicles.
c)
use of non-polluting Compressed Natural Gas (CNG) only as fuel by all buses and trucks.
d)
compulsory mixing of 20% ethyl alcohol with petrol and 20% biodiesel with diesel.

140. Which particulate size is most harmful?
a) 1.0 f.Lm or less b) 1.5 f.Lm or less c) 2.5 f.Lm or less d) 5.2 f.Lm - 2.5 f.Lm

141. Blue-baby syndrome is due to the
a) As b) NO_3 c) Cd d) Hg

142. Given pie-diagram represents the relative contribution of various greenhouse gases to total global warming.Identify the gases P, Q, R and S.



a)

P	Q	R	S
N_2O	CFCs	CO_2	Methane

b)

P	Q	R	S
N_2O	Methane	CFCs	CO_2

c)

P	Q	R	S
CO_2	N_2O	CFCs	Methane

d)

P	Q	R	S
CO_2	CFCs	N_2O	Methane

143. Study the following statements regarding acid rain and select the incorrect ones.
(i) Acid rain refers to the rainfall and other forms of precipitation with a pH of less than 5.
(ii) Oxides of sulphur and nitrogen are released from automobile exhausts, industries, power plants, etc.
(iii) These oxides of sulphur and nitrogen, may react with water in the air and form sulphuric acid (H_2SO_4) and nitric acid (HNO_3).
(iv) Acid rain has harmful effects on animals and human beings but no characteristic impact on plants.
a) (i) and (iii) b) (iii) and (iv) c) (iv) only d) (ii) only

144. A scrubber in the exhaust of a chemical industrial plant removes _____.

a) gases like sulphur dioxide.

b) particulate matter of the size 5 micrometer or above.

c) gases like ozone and methane.

d) particulate matter of th e size 2.5 micrometer or less

145. The Taj Mahal is threatened due to the effect of _____.

a) oxygen b) hydrogen c) chlorine d) sulphur dioxide

146. Polyblend is

a) a mixture of two different types of plastics

b) a fine powder of recycled modified plastic c) a blend of plastic and bitumen

d) none of these.

147. Which of the following is a method used to get rid of particulate matter present in the exhaust from a thermal power plant?

a) Magnetic precipitator b) Chromatography c) Electrostatic precipitator

d) Mass spectrometry

148. National Forest Policy of India has recommended (i) forest cover for the plains and (ii) for the hills.

a)

(i)	**(ii)**
33%	67%

b)

(i)	**(ii)**
67%	33%

c)

(i)	**(ii)**
50%	50%

d)

(i)	**(ii)**
40%	60%

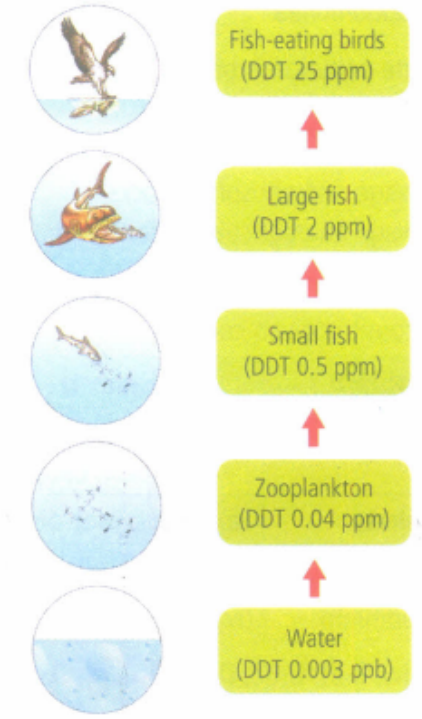
149. Nuisance growth of aquatic plants and bloom- forming algae in natural waters is generally due to high concentrations of

a) carbon b) sulphur c) calcium d) phosphorus

150. In the textbook you came across Three Mile Island and Chernobyl disasters associated with accidental leakage of radioactive wastes. In India we had Bhopal gas tragedy. It is associated with which of the following?

a) CO_2 b) Methyl Isocyanate c) CFC's d) Methyicyanate

151. Given figure represents biomagnification of DDT in an aquatic food chain. Select the incorrect statement regarding this.



a)
When agricultural fields are sprayed with DDT, it is carried by runoff water into nearby aquatic bodies.

b)
River water may have a very low concentration of DDT, but the arnivorous fish in that river may contain high concentration of DDT, which is still suitable for consumption by human beings.

c)
Increased concentration of DDT in birds affects calcium metabolism due to which egg shells become thin and break before maturity.

d) None of these

152. Which of the following is the most suitable indicator of S02 pollution in the environment?
a) Lichens b) Conifer c) Algae d) Fungi

153. Contamination of water with sewage is indicated by cysts of
a) Escherichia b) Entamoeba c) Pseudomonas d) Leishmania

154. Increase in concentration of the toxicant at successive trophic levels is known as:
a) Biogeochemical cycling b) Biomagnification c) Biodeterioration
d) Biotransformation

155. Amrita Devi Bishnoi Wildlife Protection Award is for the individuals or communities from rural areas that have shown extraordinary courage in
a) reducing environmental pollution b) reducing global warming
c) protecting wildlife d) reforestation in deforested area.

156. Greenhouse effect is due to
a) accumulation of O_3 and depletion of CO_2 b) accumulation of both O_3 and CO_2
c) accumulation of CO_2 and depletion of O_3
d) presence of green plants on the Earth.

157. The term 'terror of Bengal' is used for
a) algal bloom b) Eichhornia crassipes
c) increased biochemical oxygen demand d) eutrophication.

158. Montreal Protocol is associated with
a) control of emission of ozone depleting substances
b) control of radioactive wastes c) control of desertification
d) protection and management of forests.

159. The CO_2 content by volume, in the atmospheric air is about _____.
a) 0.0314% b) 0.34% c) 3.34% d) 4%

160. World ozone day is celebrated on
a) 16th September b) 21st April c) 5th June d) 22nd April

161. Which is not a control measure to reduce particulate matter in environment?
a) Cyclonic separators b) Scrubbers c) Effluent treatment
d) Electrostatic precipitator

162. Assertion: Through the use of catalytic converters, unburnt hydrocarbons are changed into carbon monoxide which in turn is changed into nitrogen oxides and water.
Reason: Motor vehicles equipped with catalytic converters should use leaded petrol to protect the catalyst from degradation.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.
b)
If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false. d) If both assertion and reason are false.

163. Montreal protocol aims at _____.
a) biodiversity conservation. b) control of water pollution.
c) control of CO_2 emission. d) reduction of ozone depleting substances.

164. Chemicals responsible for the Bhopal gas tragedy were
a) CO_2 and CH_4 b) phosgene and methyl isocyanate
c) polychlorinated biphenyls d) dichloro diphenyl trichloroethane.

165. Volcanic eruptions let out large quantities of
a) H_2O vapours and sulphurous gases b) Harmful dust and nitrous gases
c) Harmful dust and shoot d) Harmful dust and phosphorous gases

166. Phosphate pollution is mainly caused by _____.
a) phosphate rock only b) agricultural fertilizers only
c) sewage and phosphate rocks d) sewage and agricultural fertilizers

167. The loudness of a sound that a person can withstand without discomfort is about
a) 150 db b) 215 db c) 30 db d) 80 db.

168. Escherichia coli is used as an indicator organism to determine pollution of water with _____.
a) pollen of aquatic plants b) heavy metals c) fecal matter
d) industrial effluents

169. Size of particulate matter which can cause maximum damage to human health is
a) 25 μm b) 20 μm c) 2.5 μm d) 5 μm

170. Biochemical oxygen demand may not be good index for water bodies receiving effluents:
a) Sugar industry b) Domestic sewage c) Dairy industry d) Petroleum industry

171. Which of the following statements is not correct regarding jhum cultivation?
a) It is also called as shifting cultivation and has resulted in deforestation.
b) It helps in increasing crop yield to a considerable extent
c)
A time-gap of several years is required for the recovery of the land after cultivation
d)
It involves cutting down of trees of the forest, burning of the plant remains and then using the land for farming.

172. Montreal protocol was signed in 1987 for control of _____.
a) Release of Green House Gases b) DisPosal of e-wastes
c) Transport of Genetically modified organisms from one country to another
d) Emission of ozone-depleting substances

173. Which of the following is not a cause of natural pollution?
a) Volcanic eruption b) UV radiation c) Forest fire d) Mercury

174. Read the foilowing statements carefully.
(i) An electrostatic precipitator removes particulate matter by imposing negative charge on them.
(ii) Catalytic converters convert unburnt hydrocarbons into CO_2 and water.

(iii) Peroxyacyl nitrates (PAN) is a secondary pollutant.
(iv) DDT is a non-biodegradable pollutant.
Which of the above statements are incorrect?
a) (i) and (ii) b) (iii) and (iv) c) (i) and (iii) d) None of these

175. Read the following statements regarding the PAN (Peroxyacyl nitrates) and select the correct ones.
(i) It is a secondary pollutant present in photochemical smog.
(ii) It is produced by photochemical reactions between hydrocarbons and nitrogen oxides in the presence of sunlight or UV radiations.
(iii) It is thermally unstable and decomposes into peroxyethanoyl radicals and nitrogen dioxide gas.
(iv) It is a lachrymatory substance, causing irritation of eyes.
a) (i) and (ii) b) (iii) and (iv) c) (i), (ii) and (iii) d) (i), (ii), (iii) and (iv)

176. The concentration of polychlorinated biphenyls (PCB, an organochloride contaminant) in many fish populations has been declining, since a ban on their production was instituted in the late 1970s. PCBs remain a potential problem, however, because they are lipophilic and are known to biomagnify. Based on this knowledge, what type of fish is expected to be safest for human consumption?
a) Fish species with high fat content
b) Piscivorous fish species (i.e., which eat other fish)
c) Benthivorous fish species (i.e., which eat invertebrates on the lake bottom)
d) Small (young) fish

177. Catalytic converters, which are fitted into automobiles for reduonq the emission of poisonous gases possess which of the following metals as catalyst?
a) Platinum-Palladium b) Rhodium c) Lead d) Both (a) and (b)

178. Ozone layer of upper atmosphere is being destroyed by
a) chlorofluorocarbons b) SO_2 c) O_2 and CO_2 d) smog

179. A major component of gobar gas is _____.
a) ammonia b) methane c) ethane d) butane

180. Read the following statements and select the correct option.
Statement 1 : Ozone layer present in the stratosphere protects the living organisms from harmful UV rays coming from sun by absorbing nearly all of them.
Statement 2 : Ozone formed in the troposphere by photochemical reactions as a result of human activities is harmful for all living organisms.
a) Both statements 1 and 2 are correct.
b) Statement 1 is correct but statement 2 is incorrect.

c) Statement 1 is incorrect but statement 2 is correct.

d) Both statements 1 and 2 are incorrect.

181. In 1984, Bhopal gas tragedy was caused due to the leakage of _____.
a) potassium isocyanate b) sodium monoxide c) sodium thiocyanate
d) methyl isocyanate

182. Match the items in column I and column II and choose the correct option.

	Column - I		**Column - II**
A	UV	i	Biomagnification
B	Biodegradable organic matter	ii	Eutrophication
C	DDT	iii	Snow blindness
D	Phosphates	iv	BOD

a) A-(ii), B-(i), C(iv), D-(iii) b) A-(iii), B-(ii), C-(iv), D-(i) c) A-(iii), B-(iv), C-(i), D-(ii)

d) A-(iii), B-(i), C-(iv), D-(ii).

183. Which one of the following statements regarding CO gas is correct?
a) It is produced by the complete combustion of fossil fuels.

b) It combines with haemoglobin to form carbamino haemoglobin.

c)
It impairs oxygen transport resulting in giddiness, headache, asphyxia and even death.

d) All of these

184. Assertion: Photochemical smog is mainly composed of nitrogen oxides, volatile organic compounds, ozone and peroxyacyl nitrates.
Reason: Photochemical smog develops in cold weather conditions by the interaction of secondary pollutants.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion

c) If assertion is true but reason is false. d) If both assertion and reason are false.

185. In which one of the following the BOD (Biochemical Oxygen Demand) of sewage (s), distillery effluent (DE), paper mill effluent (PE) and sugar mill effluent (SE) have been arranged in ascending order?
a) SE b) PE c) S d) SE

186. Sound becomes hazardous noise pollution at level _____.
a) above 30 dB b) above 80 dB c) above 100 dB d) above 120 dB

187. High concentration of nutrients especially nitrates and phosphates in water can accelerate which of the following phenomenon?
a) Algal bloom b) Eutrophication c) Biomagnification d) Both (a) and (b)

188. Which is not a natural source of CH_4 in environment?
a) Biomass burning b) Termites c) Gut of ruminants d) Rice fields

189. The material generally used for sound proofing of rooms like a recording studio and auditorium, etc. is
a) cotton b) coir c) wood d) styrofoam

190. Which of the following statements is not correct regarding algal blooms?
a) Algal blooms are formed by blue-green algae.
b) Growth of Eichhornia crassipes causes colouration.
c) Increased growth of algae causes depletion of O_2 in water.
d) Algal blooms cause deterioration of water quality and fish mortality.

191. Assertion: An equilibrium is established between generation and destruction of ozone, leading to a steady state concentration of ozone layer in the stratosphere at an altitude of 20-30 km above sea level.
Reason: The thickness of the ozone layer is generally larger above the equator and smaller above the poles.
a)
If both assertion and reason are true and reason is the correct explanation of assertion
b)
If both assertion and reason are true but reason is not the correct explanation of assertion.
c) If assertion is true but reason is false. d) If both assertion and reason are false

192. DDT is _____.
a) a non-degradable pollutant b) an antibiotic c) a biodegradable pollutant
d) not a pollutant

193. Wastes may be sealed in concrete-filled drums and discharged to a depth of about 500 m. This specific statement is true for
a) γ -radlation pollutants b) UV radiation pollutants c) β-particle pollutants
d) All radioactive pollutants

194. Acid rain
(a) Causes necrosis
(b) Convert chlorophyll-a into pheophytin
(c) Responsible for formation of PAN

a) Only (a) and (b) are correct b) Only (b) and (c) are correct

c) Only (a) is correct d) Only (c) is correct

195. Read the following statements carefully and select the incorrect ones.
(i) Development of the fertile top-soil takes centuries, but it can be easily removed due to human activities such as over-cultivation, unrestricted grazing, etc.
(ii) Waterlogging results in soil salinity.
(iii) UV rays are responsible for degradation of ozone shield in atmosphere.
(iv) Ozone present in troposphere acts as a shield absorbing UV radiations coming from the Sun.
(v) Global warming can be controlled by increasing the use of fossil fuels.
a) (i), (iii) and (v) b) (iii), (iv) and (v) c) (iv) and (v) d) (i), (ii) and (iii)

196. The Air Prevention and Control of Pollution Act came into force in
a) 1957 b) 1981 c) 1985 d) 1990

197. Major aerosol pollutant in jet plane emission is _____.
a) sulphur dioxide b) carbon monoxide c) methane d) chlorofluorocarbons

198. Accelerated eutrophication occurs due to
a) increase in amount of dissolved oxygen

b) disposal of waste rich in nitrates and phosphates

c) increase in concentration of DDT and mercury in water

d) unsafe disposal of radioactive wastes.

199. Assertion: An electrostatic precipitator (ESP) is a particulate collection device that removes dust and smoke particles from flowing air using the force of an induced electrostatic charge.
Reason: An ESP is a highly efficient device as it removes 99 percent of particulate matter present in the exhaust from a thermal power plant.
a)
If both assertion and reason are true and reason is the correct explanation of assertion

b)
If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false. d) If both assertion and reason are false.

200. The green scum seen in the freshwater bodies is:
a) blue green algae b) red algae c) green algae d) both (a) and (c)

201. Joint Forest Management concept was introduced in India during:
a) 1960s b) 1970 c) 1980s d) 1990

202. Kyoto Protocol was endorsed at _____.

a) Cop-5 b) Cop-6 c) Cop-4 d) Cop-3

203. The zone of atmosphere in which ozone layer is present is.
a) Troposphere b) Stratosphere c) Mesosphere d) Ionosphere

204. Montreal protocol which calls for appropriate action to protect the ozone layer from human activities was passed in the year _____.
a) 1987 b) 1988 c) 1985 d) 1986

205. What of the following is a secondary pollutant?
a) SO_2 b) CO_2 c) CO d) O_3

206. Disease caused by eating fish found in water contaminated with industrial waste having mercury is _____.
a) Minamata disease b) Bright's disease c) Hashimoto's disease
d) Osteosclerosis

207. The Chipko movement was launched for protection of:
a) Forests b) Grasslands c) Wetlands d) Livestock

208. Assertion: Sewage, industrial effluents and waste water are non-point sources of water pollution.
Reason: Surface runoff is point source of water pollution.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.
b)
If both assertion and reason are true but reason is not the correct explanation of assertion
c) If assertion is true but reason is false. d) If both assertion and reason are false

209. Fluoride pollution initially affects:
a) kidneys b) teeth c) heart d) brain

210. Which one of the following is mismatched?
a) Fossil fuel burning - Release of CO_2 b) Nuclear power - Radioactive wastes
c) Solar energy - Greenhouse effect d) Biomass burning - Release of CO_2

211. Which of the following is correct regarding 'El Nino' Effect?
a) Temperature rise leads to odd climatic changes
b) Cutting down the use of fossil fuels c) Planting more trees
d) Slowing down the growth of human population

212. Which of the following conference obtained commitments from different countries for reducing overall green house gas emission at a level 5% below 1990 level by 2008-2012?

a) Kyoto Protocol, 1997 b) Earth Summit, Rio-de-Janeiro, 1992

c) Montreal Protocol, 1987 d) Helsinki Declaration, 1989

213. Assertion: Compressed natural gas (CNG) is natural gas under pressure and mainly composed of methane.
Reason: One of the advantages of using CNG as a fuel in automobiles is that it requires very less space for storage as compared to that of petrol or diesel.
a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false d) If both assertion and reason are false.

214. Polyblend, a fine powder of recycled modified plastic' has proved to be a good material for _____.
a) use as a fertilizer b) construction of roads c) making tubes and pipes
d) making plastic sacks

215. In 1984, Bhopal gas tragedy took place because methyl isocyanate ___.
a) reacted with DDT b) reacted with ammonia c) reacted with CO_2
d) reacted with water

216. Given below are some differences between primary air pollutants and secondary air pollutants. Which one of the following is an incorrect difference?
a)

Primary air pollutants	**Secondary air pollutants**
These persist in the form in which they are added to the environment.	These are formed by interaction among the primary pollutants

b)

Primary air pollutants	**Secondary air pollutants**
These are more toxic than the secondary pollutants.	These are less toxic than the primary pollutants.

c)

Primary air pollutants	**Secondary air pollutants**
Examples include DDT, CO_2	Examples Ozone, PAN

d) None of these

217. Select the correct match of air pollution source with the type of pollutant and the effect it produces.
a) Chemical factory$\rightarrow$ NO_2 $\rightarrow$Ozone hole
b) Automobile exhaust $\rightarrow$ N_2O $\rightarrow$ Asphyxia effect

c) Heavy industry$\rightarrow$ CO_2 $\rightarrow$Acid rain

d) Incinerators$\rightarrow$ NO_x gases $\rightarrow$ Photochemical smog

218. Which of the following protocols did aim for reducing of chloro-fluoro-carbons into the atmosphere?

a) Kyoto Protocol b) Gothenburg Protocol c) Geneva Protocol

d) Montreal Protocol

219. Which one of the following statements is incorrect regarding Bhopal gas tragedy?

a) Methyl isocyanate gas leakage took place.

b) Thousands of human beings died. c) Radioactive fallout engulfed Bhopal.

d) It took place in the night of December 2/3, 1984.

220. The Government of India has passed the environment (Protection) Act in the year

a) 1990 b) 1987 c) 1986 d) 1992

221. A higher biochemical oxygen demand in a particular segment of a river indicates that

a) the segment is free from pollution b) the segment is highly polluted

c) aquatic life has started flourishing

d) the river has high number of aquatic animals.

222. Which of the following materials takes the longest time for biodegradation?

a) Cotton b) Paper c) Bone d) jute

223. Acid rain is caused by increase in the atmospheric concentration of _____.

a) SO_3 and CO b) CO_2 and CO c) O_3 and dust d) SO_2 and NO_2

224. Read the given statements and select the correct option.

Statement 1 : Average temperature of Earth has increased by O.6°C during the past century.

Statement 2 : There has been a progressive increase in the use of fossil fuels generating more greenhouse gases.

a) Both statements 1 and 2 are correct.

b) Statement 1 is correct but statement 2 is incorrect.

c) Statement 1 is incorrect but statement 2 is correct.

d) Both statements 1 and 2 are incorrect.

225. Noise pollution may cause nervousness and irritability by stimulating the secretion of

a) thyroid hormone b) adernaline hormone c) parathyroid hormone

d) none of these.

226. Select the correct statement out of the following.

a)
Electrostatic precipitators (ESPs) can remove over 99% particulate matter present in the exhaust from a thermal power plant.

b)
Over half of the e-wastes generated in developed countries are exported to developing countries, mainly to China, India and Pakistan, where metals like Cu, Fe, Si, Ni, etc., are recovered during recycling process.

c)
Use of nuclear energy has two very serious inherent problems first is accidental leakage and the second is safe disposal of radioactive wastes.

d) All of these

227. Catalytic converters are fitted into automobiles to reduce emission of harmful gases. Catalytic converters change unburnt hydrocarbons into:
a) carbon dioxide and water b) carbon monooxide c) methane
d) carbon dioxide and methane.

228. A renewable exhaustible natural resource is _____.
a) coal b) petroleum c) minerals d) forest

229. Given below are four statements each with two blanks. Select the option which correctly fills up the blank in any two statements.
(i) Bhopal gas disaster took place on _____ 1984 and this day is now observed as the_____day in India to make the anniversary of the Bhopal gas disaster.
(ii) _____ is a biodegradable pollutant while _____is a non-biodegradable pollutant.
(iii) When pollutants are released from a single point it is called _____pollution, but when it is over a large area, then it is called _____pollution.
(iv) is the world's most problematic aquatic weed, introduced in India for its lovely flowers, also called as _____.
a) (i) December 5, National pollution prevention (iv) Parthenium, terror of Bengal
b) (i) December 2, Bhopal gas tragedy (ii) DDT, sewage
c) (ii) Sewage, DDT (iii) point source, non-point source
d) (iii) line source, fixed source (iv) Eichhornia, tiger of Bengal

230. Which of the following is the most dangerous metal pollutant of automobile exhaust?
a) Cadmium b) Copper c) Mercury d) Lead

231. Ultraviolet radiations from sunlight cause a reaction which produces _____.
a) O_3 b) SO_2 c) CO d) CH_4

232. Which one is the correct percentage of greenhouse gases?
a) Methane - 20%, N_2O - 18% b) CFCs-14%, Methane - 20%
c) CO_2 - 40%, CFCs- 30% d) N_20 - 6%, CO_2 -86%

233. Match column I with column II and select the correct option from the given codes

	Column - I		Column - II
A	Nitrates	i	Primary pollutant
B	E-Wastes	ii	Minamata disease
C	Mercury	iii	Secondary pollutant
D	DDT	iv	Blue-baby syndrome
E	PAN	v	Electronic wastes

a) A-(ii), B-(iv), C-(v), D-(i), E-(iii) b) A-(iv), B-(v), C-(ii), D-(i), E-(iii)

c) A-(iv), B-(v), C-(iii), D-(ii), E-(i) d) A-(ii), B-(v), C-(iv), D-(i), E-(iii)

234. Global warming can be controlled by _____.

a) Reducing reforestation, increasing the use of fossil fuel.

b) Increasing deforestation, slowing down the growth of human population.

c) Increasing deforestation, reducing efficiency of energy usage.

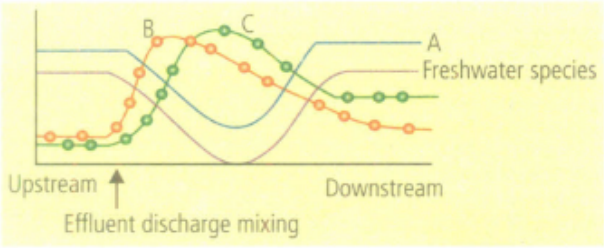
d) Reducing deforestation, cutting down use of fossil fuel.

235. Domestic waste constitutes _____.

a) non-biodegradable pollution b) biodegradable pollution c) effluents

d) air pollution

236. The graph given below represents changes in different ecological parameters due to effluent mixing in a stream.The three lines A, B and C represent



A: oxygen concentration A: pollutant

B: biological O_2 demand B: aerobic process

a) C: pollution resistant species b) C: anaerobic process

A: oxygen concentration A: phosphate concentration

B: CO_2 concentration B: nitrate concentration

c) C: temperature d) C: rate of photosynthesis.

237. Bone cancer is caused by

a) Iodine -127 b) Strontium - 90 c) Caesium - 137 d) Phosphorous - 32

238. Read the following statements regarding particulate matter and select the incorrect ones.

(i) Particulate matter (PM) consists of shoot, flyash, dust, spores, pollen grains, ete.

(ii) Particulate matter is differentiated into settleable (larger than 10 urn. remaining in air for less than one day) and suspended (less than 10 urn remaining In air for more than one day to several weeks) particulate matter.

(iii) SPM (Suspended particulate matter) consists of aerosol, dust and mist.
(iv) Particulate matter causes respiratory diseases such as tuberculosis, allergy and many more diseases in animals and plants.
(v) According to Central Pollution Control Board (CPCB), particulate size of 2.5 urn or less in diameter are responsible for causing the greatest harm to human health.
a) (i) and (ii) b) (iii) and (iv) c) (ii) only d) None of these

239. Eutrophication of water bodies leading to kilting of fishes is mainly due to non-availability of _____.
a) light b) essential minerals c) oxygen d) food

240. Which one is wrong statement?
a) Ozone in the upper part of atmosphere is harmful to animals
b) Greenhouse effect is a natural phenomenon
c) Eutrophication is a natural phenomenon in freshwater bodies
d) Most of the forests have been lost in the tropical area

241. The following table summarises the differences between biodegradable and non-biodegradable pollutants. Pick out the wrong differences and select the correct answer.

	Biodegradable pollutants	**Non-biodegradable pollutants**
(i)	These are the pollutants which can be easily degraded by micro-organisms.	These are the pollutants which can not be degraded into harmless materials.
(ii)	These can be used to produce energy (through biogas), compost, manure, etc	These are difficult to manage as natural method of degradation is absent.
(iii)	These usually do not enter biogeochemical cycles.	These become a part These become a part biogeochemical cycles.
(iv)	Examples: DDT, BHC, plastics, polyethylene, glass, etc.	Examples: Sewage, garbage, animal waste, etc.

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

242. With its very large population of vehicular traffic, Delhi is one of the most polluted cities of the world. Which of the following steps were taken by the government to reduce vehicular pollution in Delhi?
(i) Switching over the entire fleet of public transport ie., buses, autorickshaws, from diesel to CNG
(ii) Phasing out of old vehicles
(iii) Use of unleaded petrol in vehicles
(iv) Use of low sulphur petrol and diesel in vehicles

(v) Use of catalytic converters in vehicles

(vi) Application of stringent pollution level norms for vehicles such as Euro - II norms, etc.

a) (ii) and (iv) b) (ii), (iv) and (v) c) (iv) and (v) d) All of these

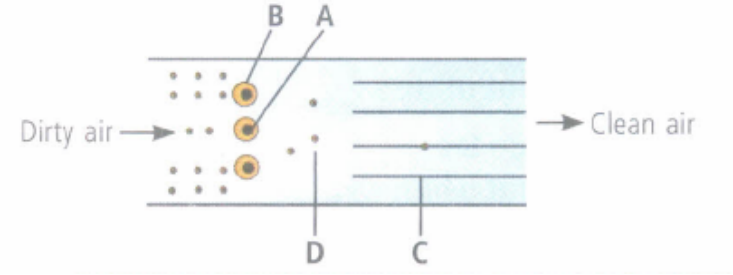
243. Assertion: Heavy metals and persistent pesticides pass into the food chain and increase in amount per unit weight of the organism at successive trophic levels.
Reason: Heavy metals and persistent pesticides can be easily metabolised by the organism's body.

a)
If both assertion and reason are true and reason is the correct explanation of assertion.

b)
If both assertion and reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false. d) If both assertion and reason are false.

244. Given below is a diagram of electrostatic precipitator. Identify A, B, C and D and select the correct option.



a)

A	B	C	D
Negatively charged wire	Negatively charged dust particles	Discharge corona	Collection plate

b)

A	B	C	D
Negatively charged wire	Discharge corona	Collection plate	Negatively charged dust particles

c)

A	B	C	D
Positively charged wire	Positively charged dust particles	Discharge corona	Collection plate

d)

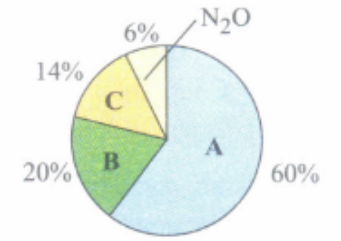
A	B	C	D
Positively charged wire	Discharge corona	Collection plate	Positively charged dust particles

245. Which one of the following pairs is mismatched.
a) Fossil fuel - burning release of CO_2 b) Nuclear power - radioactive wastes
c) Solar energy - greenhouse effect d) Biomass burning - release of CO_2

246. Euro-II (April - 2000) is emission norms for reducing
a) O_3 and CO b) NO_2 and N_2O c) Sulphur and Aromatic hydrocarbons
d) CO_2 and particulate matter

247. The products resulting from atmospheric reactions of hydrocarbons and nitrogen oxides in the presence of sunlight are called
a) Primary pollutant b) Secondary pollutant c) Tertiary pollutant
d) Non-pollutant

248. Given pie-diagram represents the relative contribution of various GHGs to total global warming. Select the correct statement(s) regarding A, B and C.



a) A is the gas which is produced during the combustion of fossil fuels.
b) B are the chemicals which are used as coolants in refrigerators.
c) C is the gas which is the major constituent of biogas. d) All of these.

249. Biochemical Oxygen Demand (BOD) in a river water _____.
a) has no relationship with concentration of oxygen in the water.
b) gives a measure of Salmonella in the water.
c) increases when sewage gets mixed with river water.
d) remains unchanged when algal bloom occurs.

250. Atmosphere of big metropolitan cities is polluted most by _____.
a) automobile exhausts b) pesticide residue c) household waste
d) radioactive fall-out

251. Which is not an effect of global warming?
a) More extreme weather condition b) Poleward shifting of organism
c) Rise of sea level d) Good fungal growth in soil

252. Increasing skin cancer and high mutation rate are the result of:
a) ozone depletion b) acid rain c) CO pollution d) CO_2 pollution

253. According to Central Pollution Control Board (CPCB). Which particulate size in diameter (in micrometers) of the air pollutants is responsible for greatest harm to human health:
a) 2.5 or less b) 1.5 or less c) 1.0 or less d) 5.2 - 2.5

254. Select the correct match.

a) Integrated farming: Ramesh Chandra Dagar

b) Integrated waste water treatment: Ahmed Khan

c) Solid waste management: Ramesh Chandra Dagar

d) E-waste management: Chandi Prasad Bhatt

255. According to the Central Pollution Control Board, particles that are responsible for causing great harm to human health are of diameter

a) 2.50 micrometers b) 5.00 micrometers c) 10.00 micrometers

d) 7.5 micrometers

256. The worst environmental hazards were created by accidents in nuclear power plant and MIC gas tragedy respectively in _____.

a) Russia in 1990 and Bhopal in 1986 b) Ukrainian 1988 and USA in 1984

c) Bhopal in 1984 and Russia in 1990 d) Ukrainian l986 and Bhopalin 1984

257. World's most problematic aquatic weed is:

a) Azalia b) Walffia c) Eichharnia d) Trapa

258. Select the correct statement regarding integrated organic farming.

a)

It is a cyclical, zero waste procedure where waste products from one process are cycled in as nutrients for other processes.

b)

In this process, industrial wastes is used to manufacture product such as polyblend

c) In this process, chemical fertilisers are used to increase yield

d) both (a) and (c)

259. Which of the following statements regarding ozone is incorrect?

a)

'Good ozone' is formed in the lower atmosphere (troposphere) that absorbs harmful UV rays coming from Sun; 'bad ozone' is present in the upper part of atmosphere (stratosphere) that harms plants and animals.

b)

The thickness of the ozone in a column of air from the ground to the top of the atmosphere is measured in terms of Dobson units (DU).

c)

Recognising the deleterious effects of ozone depletion, an international treaty, known as the Montreal Protocol, was signed at Montreal (Canada) in 1987 (became effective in 1989) to control the emission of ozone depleting substances.

d) None of these

260. The smog which is formed at high temperature is

a) London smog b) Classical smog c) Los Angeles smog d) Sulphurous smog

261. Highest DDT deposition shall occur in _____.
a) phytoplankton b) sea gull/birds c) crab d) eel

262. Carbon monoxide is a pollutant because _____.
a) reacts with O_2 b) it inhibits glycolysis c) it reacts with hemoglobin
d) it makes nervous system inactive

263. If there is no greenhouse effect, then the average temperature at surface of earth would have been:
a) 15^0C b) -18^0C c) -6^0C d) 10^0C

264. Painful skeletal deformities called itai-itai is caused due to
a) Cd b) Hg c) CO d) NO_2

265. Which one of the following statements is not valid for aerosols?
a) They alter rainfall and monsoon patterns.
b) They cause increased agricultural productivity.
c) They have negative impact on agricultural land.
d) They are harmful to human health