Exercise-1

✍ **Marked Questions are for Revision Questions.**

ONLY ONE OPTION CORRECT TYPE

SECTION - A # TYPES OF POLLUTANTS, TYPES OF POLLUTION – AIR POLLUTION, ACID RAIN, OZONE DEPELATION, WATER POLLUTION

1. Pollution can bring about change in
(1) Biogeochemical cycling (2) Abiotic environment
(3) Biotic environmemt (4) All the above

2.✍ One of the following is the major reason for pollution in big cities
(1) Fossil fuels (2) Acid rain (3) Heat dispersion (4) None

3.✍ One of the following is normally not an important atmospheric pollutant and remains constant
(1) CO_2 (2) SO_2 (3) CO (4) Hydrocarbon

4.✍ Carbon monoxide is a major pollutant of
(1) Water (2) Air (3) Noise (4) Soil

5.✍ Air pollution effects are usually found on
(1) Leaves (2) Flowers (3) Stems (4) Roots

6. The carbondioxide contents in atmospheric air is about
(1) 0.034% (2) 0.34% (3) 2.34% (4) 6.5%

7.✍ Major pollutant present in the jet plane emission is
(1) CCl_4 (2) SO_2 (3) SO_3 (4) fluorocarbon

8.✍ One of the most remarkable effect of SO_2 and its related transformed products on plants is
(1) Cell wall destruction (2) Plasmolysis
(3) Destruction of dictyosomes (4) Chlorophyll destruction

9.✍ Lead is .... pollutant
(1) Soil (2) Air (3) Water (4) Noise

10.✍ Pollutant responsible for causing phaeophytization is
(1) SO_2 (2) NO_x (3) CO_2 (4) Aeroallergens

11.✍ The classical smog was first obseved in
(1) London (2) Tokyo (3) Paris (4) New York

12. The term smog was coined by
(1) Des Voeux (2) Tansley (3) Odum (4) Clements

13.✍ Which of the following does not cause atmospheric pollution
(1) Automobiles (2) Nuclear power plants
(3) Hydroelectric power plants (4) Thermal power plants

14. Jet air lines produce fluoro-carbons in the form of
(1) Mist (2) Fog
(3) Photochemical smog (4) Aerosol

15. Which of the following air pollutant is carcinogenic
(1) 3, 4 – Benzpyrene (2) PAN (3) Ethylene (4) N_2O

16. Photochemical smog is also called as
(1) California type smog (2) Tokyo type smog
(3) Los Angeles type smog (4) New York type smog

17. The Mathura refinery smoke is thought to reduce the shine of Tajmahal by
(1) Increasing U.V radiations (2) Acid rain
(3) 3, 4 benzpyrene (4) All of the these

18. The common refrigerant chlorofluoromethane (freon) and NO_x are serious pollutants because
(1) Destroys haemoglobin (2) Disrupts O_3 layer
(3) It lowers atmospheric temperature (4) Prevents cloud condensation

19. Some reliable indicators of air pollutants (SO_2 and noxious gases) are
(1) Lichens and mosses (2) Ferns and Cycas
(3) 'Neem' tree and Eichhornia (4) Green algae and aquatic liverworts

20. Most hazardous metal pollutant of automobile exhaust is
(1) Hg (2) Cd (3) Pb (4) Cu

21. Given bellow the following statements about catalytic converter
(a) It has expensive metals like platinum-palladium and rhodium as the catalysts.
(b) They convert unburnt hydrocarbons into carbon dioxide and water.
(c) They convert carbon monoxide and nitric oxide into carbon dioxide and nitrogen gas respectively.
(d) Motor vehicles equipped with catalytic converter should use leaded petrol.
Select the correct statements -
(1) a, b, c, d (2) b, d (3) a, c, d (4) a, b, c

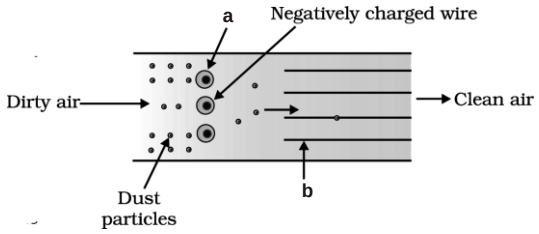
22. Acid rains are due to
(1) O_3 (2) $SO_2 + NO_2$ (3) CO (4) CO_2

23. The chemical that contributes to the destruction of ozone layer of the earth's surface is
(1) Sulphur dioxide (2) Mercury
(3) Chlorofluorocarbons (4) Carbon monoxide

24. 'Ozone day' is observed on
(1) Jaunary 30 (2) April 21 (3) September 16 (4) December 25

25. Most hazardous metal pollutant of automobile exhaust is
(1) Mercury (2) Copper (3) Cadmium (4) Lead

26.



Here 'a' & "b" are respectively

(1) a - discharge corona b - collection plate grounded

(2) a - collection plate grounded b - discharge corona

(3) a - particulate matter b- collection plant ground

(4) a - discharge corona b - particulate matter

27. The loss of species in the tropical countries is mainly due to

(1) Pollution (2) Soil erosion (3) Deforestation (4) Urbanization

28. Increase skin cancer and higher mutation rates are generally the consequence of

(1) CO_2 (2) Ozone depletion (3) Biomagnification (4) Acid rain

29. In coming years skin allergies and disorders will be more common due to

(1) Air pollution (2) Ozone depletion (3) Water pollution (4) Misuse of detergents

30. Rain is called acid rain when its pH is below

(1) 7 (2) 6.5 (3) 6 (4) 5.6

31. Which one causes photochemical smog

(1) O_3, PAN and NO_2 (2) O_2, PAN and CO (3) HCN, NO and PAN (4) O_2, PAN and NO_2

32. Match the columns

Column-I		Column-II	
a	Nitrous oxide	i	Secondary pollutant from car exhausts
b	Chlorofluoro - carbons	ii	Combustion of fossil fuels
c	Methane	iii	Denitrification
d	Ozone	iv	Refrigerators aerosols, sprays
e	Carbon dioxide	v	Cattle, rice fields, toilets

(1) a-iii, b-iv, c-v, d-i, e-ii (2) a-v, b-i, c-iii, d-iv, e-ii

(3) a-iv, b-v, c-i, d-ii, e-iii (4) a-i, b-iii, c-iv, d-v, e-ii

33. In cities like Bombay and Calcutta the major air pollutants are

(1) Ozone (2) Carbon monoxide and oxides of Sulphur

(3) Hydrocarbons and not air (4) Algal spores and marsh gas

34. If water pollution continues at present rate, it will eventually

(1) Stop water cycle

(2) Prevent precipitation

(3) Make oxygen molecules unavailble to water plants

(4) Make nitrate molecules unavailable to water plants

35. Which of the following is the main factor of water pollution

(1) Smoke (2) Industrial waste (3) Detergent (4) Ammonia

36. What is B.O.D.

(1) The amount of O_2 utilised by organisms in water

(2) The amount of O_2 utilized by micro organisms for decomposition

(3) The total amount of O_2 present in water

(4) All of the above

37. Biological treatment of water pollution is done with the help of

(1) Phytoplanktons (2) Lichens (3) Fungi (4) None of the above

38. Sewage drainage into water bodies is harmful for fishes because

(1) Excessive CO_2 is added in water

(2) It gives off a bad smell

(3) It removes the competition with fishes to dissolved oxygen

(4) It increase competition with fishes to dissolved oxygen

39. Water blooms are formed by

(1) Lemna (2) Hydrilla (3) Water Hyacinth (4) Planktonic algae

40. Water pollution

(1) Increases oxygenation

(2) Decreases turbidity

(3) Inceases turbidity and deoxygenation

(4) Increases photosynthesis

41. The most common indicator organisms that represents polluted water is

(1) E. coli (2) S. typhi (3) Vibrio (4) Entamoeba

42. As compared to tap water, the BOD of a water body polluted with sewage would be

(1) High (2) Low (3) Normal (4) Nil

43. ---------- concentration of heavy metals like mercury, cadmium, copper, lead is harmful for living organisms as well as abiotic contents of environment

(1) > 3 g/cm^3 (2) > 5 g/cm^3 (3) > 2g/cm^3 (4) > 1g/cm^3

44. One of them is an indicator for water quality

(1) Escherichia coli (2) Beggiatoa (3) Cadothrix (4) Azospirillum

45. Which of the following citizens group is responsible for the upkeep and safeguarding of marshes in the tour of Arcata situated along the northern cost of California?

(1) CITES (2) ICRISAT (3) IUCN (4) FOAM

46. In the aquatic body the concentration of DDT in small fish

(1) 0.003 ppm (2) 0.5ppm (3) 0.04ppm (4) 2ppm

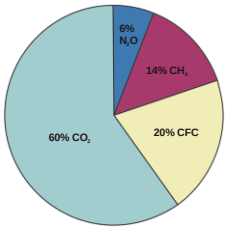
47. A lake near village suffered heavy mortality of fishes within a few days. Which of the following statements could be the correct explanation for this?

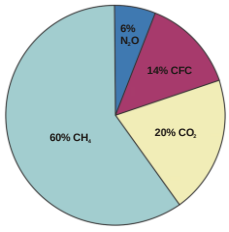
(i) Lots of urea and phosphate fertilizers were used in the crops in the nearby fields.
(ii) The croplands of the village were sprayed with DDT.
(iii) The lake water turned green and stinky.
(iv) Phytoplankton populations in the lake declined initially thereby greatly reducing photosynthesis.
(1) (i) and (iii) (2) (i) and (ii) (3) (ii) and (iii) (4) (ii) and (iv)

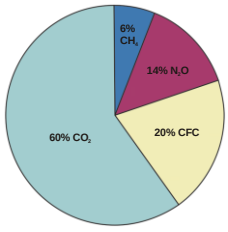
48. Given below are four statements each with two blanks. Select the option, which correctly fills up the blank in any two statements.
(i) Bhopal gas disaster took place on _____ 1984 and this day is now observed as the ____day in India to make the anniversary of the Bhopal gas disaster
(ii) _____ is 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 _____.
(1) (i) December 5, National pollution prevention (iv) *Parthenium*, terror of Bengal.
(2) (i) December 2, Bhopal gas tragedy (ii) DDT, sewage
(3) (ii) Sewage, DDT (iii) point source, diffused source
(4) (iii) Line source, fixed source (iv) Eichhornia, tiger of Bengal

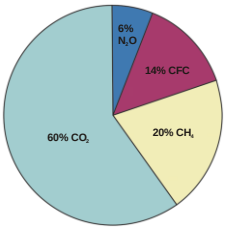
SECTION - B # Soil pollution, Noise pollution, Redioactive waste, Global warming - Green house effect, International efforts to reduce pollution.

1. Select the correct option about ratio of green house gases

(1) 

(2) 

(3) 

(4) 

2. The environmental havoc created in
(1) Russia in 1990 and Bhopal in 1986 (2) Ukraine in 1988 and USA in 1994
(3) Bhopal in 1984 and Russia in 1990 (4) Ukraine in 1986 and Bhopal in 1984

3. Man made radio active element Sr^{90} accumulates through
(1) Air (2) Food web (3) Water (4) Contaminated soil

4. Phosphate pollution is caused by
(1) Agricultural fertilizers only (2) Sedimentary rocks
(3) Sewage and phosphate rock (4) Sewage and agricultural fertilizers

5. Noise pollution is measured in
(1) Decibels (db) (2) Pikograms (3) Micrograms (4) None

6. Sewage water is purified for recycling by the action of
(1) Protozoans (2) Micro-organisms (3) Plants and light (4) Fish

7. One of the following is not a threat to life
(1) Biopollutants (2) Ionosphere (3) Nuclear blast (4) Deforestation

8. The indiscriminate use of fertilizers causes
(1) Air pollution (2) Soil pollution (3) Water pollution (4) Both (2) & (3)

9. DDT spraying on the crops results in the pollution of
(1) Soil and water (2) Air and soil (3) Crops and air (4) Air and water

10. Montreal Protocol was aimed to
(1) To reduce green house gases (2) Limit the production and use of ODS
(3) Mitigate climatic change (4) Implement Agenda 21

11. Bone cancer is caused by
(1) Iodine –127 (2) Strontium –90 (3) Cesium –137 (4) None of these

12. Ecological blacklash (or Ecological explosion) is
(1) Heat emission due to bomb explosion
(2) Production of useful ecological effect by a previously useful chemical
(3) Formation of secondary polutants from reaction of primary pollutants
(4) Production of adverse ecological effect by a previously useful chemical

13. The controlled aerobic combustion of wastes inside chambers at temperature of 900-1300ºC is known as
(1) Incineration (2) Recycling (3) Pyrolysis (4) Sanitary dumping

14. Arrange CFC, CH_4, N_2O and CO_2 in decreasing order according to their contribution in green house effect
(1) $CO_2 > N_2O > CFC > CH_4$ (2) $CFC > CO_2 > CH_4 > N_2O$
(3) $CH_4 > CFC > N_2O > CO_2$ (4) $CO_2 > CH_4 > CFC > N_2O$

15. The percentage of forest cover recommended by the National forest policy (1988) is –
(1) 20% for plains and 80% for hills (2) 33% for plains and 67% for hills
(3) 37% for plains and 63% for hills (4) 23% for plains and 77% for hills

16. Green muffler is related to pollution of
(1) Air (2) Soil (3) Noise (4) Water

17. Minamata and itai-itai are caused by the pollution of:
(1) Mercury and Lead (2) Mercury and Cadmium
(3) Lead and Tin (4) Lead and strontium

MISCELLANEOUS QUESTIONS

1. Given below the following table, select the incorrect option

Name of pollutant	Source	Effect

(1)	SO_2	Combustion of fossil fuel	Photo chemical smog
(2)	PAN	HC + Nitrogen oxides in Sunlight	Blocking of PS-II in plants
(3)	NO_X	Nitrogenous fertilizers and Automobile exhaust	Acid rain
(4)	CO_2	Burning of fossil fuel	Global warming

2. Select the wrong statement in the given options–
(1) Ozone in upper part of atmosphere is harmful to the animal.
(2) Most of the forests have been lost in tropical areas.
(3) Green house effect is a natural phenomenon.
(4) Eutrophication is a natural phenomenon in fresh water bodies

3. Carbon monoxide kills because it destroys
(1) Haemoglobin (2) Phytochrome (3) Cytochrome (4) Both 1 and 2

4. DDT concentration recorded in human body has been
(1) 0.3 – 0.7 ppm (2) 1.3 – 3.1 ppm (3) 13–31 ppm (4) 30–70 ppm

5. Mottling of teeth is due to presence of an element in drinking water
(1) Mercury (2) Fluorine (3) Boron (4) Chlorine

6. NEERI is
(1) National Environmental enginnering Research Institute
(2) National Ecological and Environmental Research Institute
(3) National Ethological and Ecological Research Institute
(4) National Eugenics and Ecological Research Institute.

7. Methane gas producing field is
(1) Wheat field (2) Paddy field (3) Cotton field (4) Groundnut field

8. Treatment of polluted water is carried out with the help of
(1) Lichens (2) Fungi (3) Ferns (4) Phytoplankton

9. DDT has been a major pollutant because it:
(1) Kills aquatic animals (2) Kills pests
(3) Destroys many valuable species (4) Is nondegradable

10. Affinity of CO for haemoglobin as compared to O_2 is
(1) Two times (2) Twenty times (3) 100 times (4) 300 times

11. Hay fever is caused by
(1) Hepatitis (2) Dengue (3) Allergy (4) Helper T-cells

12. Silicosis occurs due to
(1) Acid rain (2) Ozone depletion
(3) Inhalation of aerosols (4) Inhalation of SO_2

13. Which can be used for clearing water body
(1) Chlorella (2) Eichhornia (3) Cyanobacteria (4) Chlamydomonas

14. Pollutant emitted by paddy fields is
(1) CO_2 (2) CH_4 (3) CO (4) H_2O_2

15. Noise becomes uncomfortable above
(1) 180 dB (2) 140 dB (3) 100 dB (4) 80 dB

16. Occurrence of water blooms in a lake indicates
(1) Excessive nutrient availability (2) Nutrient deficiency
(3) Oxygen deficiency (4) Absence of herbivores

17. Chernobyl nuclear tragedy occurred in
(1) April 26, 1986 (2) August 6, 1945 (3) August 9, 1945 (4) December 3, 1984

18. Insecticides usually act upon
(1) Muscular system (2) Digestive system (3) Nervous system (4) circulatory system

19. Lead concentration in blood is considered alarming, if it is
(1) 4-6 µg/100 ml (2) 10 µg/100ml (3) 20 µg/100 ml (4) 30µg/100ml

20. Environmental Protection act was passed in
(1) 1986 (2) 1981 (3) 1974 (4) 1968

21. Which is correctly matched?
i. Arsenic poisoning - Black foot disease.
ii. Secondary Effluent treatment - Biological process.
iii. Pyrolysis - Solid soil waste disposal
iv. Tubifex - Water pollution indicator
v. Biomagnification - Degradable pollutants
(1) i, ii, iii, v (2) i, iii, iv, v (3) ii, iii, iv, v (4) i, ii, iii, iv

22. Match the columns and find out the correct combination

I		II	
a	DDT	i	CO, CO_2
b	PAN	ii	Smog
c	Acid rain	iii	Biological magnification
d	Global warming	iv	SO_2

(1) a-iv, b-iii, c-ii, d-i (2) a-i, b-iii, c-ii, d-iv
(3) a-ii, b-iii, c-iv, d-i (4) a-iii, b-ii, c-iv, d-i

23. High amount of Esherichia coli in water is an indicator of
(1) Hardness of water (2) Industrial pollution
(3) Sewage pollution (4) Presence of chlorine in water

24. Effect of pollution is observed first on
(1) Food crops (2) Green vegetation (3) Micro-organisms (4) Herbivores

25. Which one is employed for clearing oil spillage
(1) Escherichia coil (2) Streptococcus
(3) Bacillus thuringiensis (4) Pseudomonas

26. Ozone hole enhances
(1) UV radiations reaching earth (2) Number of cataracts
(3) Skin cancers (4) All the above

27. Bhopal tragedy was cuased by
(1) IAA (2) LIC (3) MIC (4) LPG

28. In Kyoto protocol, the major nations agreed to reduce emission of green house gases by
(1) 2008 (2) 2010 (3) 2012 (4) 2018

29. During daytime sound level in silent zone is
(1) 20 dB (2) 40 dB (3) 50 dB (4) 90 dB

30. The pesticide most persistent in the soil is
(1) DDT (2) BHC (3) Dieldrin (4) Baygon

31. Respiratory disorders occur due to automobile exhaust because of the release of
(1) CO (2) NO_2 (3) CO_2 (4) O_3

32. Sewage water turns black due to action of
(1) H_2S (2) NH_3 (3) CH_4 (4) CO_2

33. Water pollution is caused due to
(1) sewage and other wastes (2) industrial effluents
(3) agricultural discharges (4) All of the above

Exercise-2

1. Which of the following are biomagnified at different levels of food chain? **(NSEB- 2013)**
i. Heavy metal
ii. Aerosol
iii. DDT
iv. Green house gases
(1) i and ii (2) i and iv (3) i and iii (4) ii and iii

2. Two nearby seashores A and B were compared using dominance and diversity indices. It was found that the diversity index of A was better than that of B while the dominance index of B was better that that of A. Which of the following can be true? **[NSEB-2014]**
(1) Eutrophication has occured at A (2) Eutrophication has occured at B
(3) Habitat loss could be a problem at A (4) Indicator species are present at B

3. Events that take place in eutrophication are listed below: **[NSEB-2014]**
i. Excessive growth of aquatic vegetation

ii. Depletion of dissolved O_2
iii. Bacteria feed on dead vegetation
iv. Aquatic ecosystem becomes rich in phosphates
The correct order in which these events occur is :
(1) i, iv, iii, ii (2) iv, i, iii, ii (3) i, ii, iii, iv (4) iv, iii, ii, i

Exercise-3

PART - I : NEET / AIPMT QUESTION (PREVIOUS YEARS)

1. Use of lichens in case of pollution is **(AIPMT 1999)**
(1) treatment of pollutant water (2) Bioindicators of pollution
(3) Promote pollution (4) Lichens have no relation with pollution

2. A secondary pollutant is **(AIPMT 1999)**
(1) CO (2) CO_2 (3) PAN (4) Aerosol

3. DDT is **(AIPMT 1999)**
(1) Biodegradable pollutant (2) Nondegradable pollutant
(3) Not a pollutant (4) An antibiotic

4. Intensity of sound in normal conversation is **(AIPMT 2001)**
(1) 10 – 20 dB (2) 30 – 60 dB (3) 70–90 dB (4) 120–150 dB

5. Maximum green house gases are released by **(AIPMT 2002)**
(1) India (2) Britain (3) U.S.A. (4) France

6. Green house effect is due to **(AIPMT 2002)**
(1) X-rays (2) UV rays (3) Green rays (4) Infra-red rays

7. Polluted waters do not contain **(AIPMT 2002)**
(1) Stone fly Larvae (2) Sewage fungus (3) Water Hyacinth (4) cyanobacteria

8. Melanin protects us from **(AIPMT 2002)**
(1) X-rays (2) Infra red rays (3) Visible rays (4) UV rays

9. Fluoride pollution mainly affects **(AIPMT 2003)**
(1) Brain (2) Heart (3) Teeth (4) Kidney

10. Bhopal gas tragedy of 1984 took place because methyl isocyanate reacted with **(AIPMT 2004)**
(1) DDT (2) Ammonia (3) CO_2 (4) Water

11. Which one of the following is mismatched? **(AIPMT 2005)**
(1) Fossil fuel burning - Release of CO_2 (2) Nuclear power - Radioactive wastes
(3) Solar energy - Green house effect (4) Biomass burning - Release of CO_2

12. Identify the correctly matched pair **(AIPMT 2005)**
(1) Basel convention - Biodiversity conservation
(2) Kyoto protocol - Climate change
(3) Montreal protocol - Global warming
(4) Ramsar convention - Ground water pollution

13. Which one of the following is not used for disinfection of drinking water? **(AIPMT 2005)**
(1) Chlorine (2) Ozone (3) Chloramine (4) Phenyl

14. Limit of BOD prescribed by Central Pollution Control Board for discharge of industrial and municipal waste waters into natural surface waters is **(AIPMT 2006)**

(1) < 3.0 ppm (2) < 10 ppm (3) < 30 ppm (4) < 100 ppm

15. Montreal protocol which calls for appropriate action to protect the ozone layer from human activities was passed in year **(AIPMT 2006)**

(1) 1985 (2) 1986 (3) 1987 (4) 1988

16. Blue-baby syndrome results from **(AIPMT 2006)**

(1) Excess of ODS (2) Excess of chlorides

(3) Excess of dissolved oxygen (4) Methaemoglobin

17. Photochemical smog does not contain **(AIPMT 2006)**

(1) PAN (2) Ozone

(3) Nitrogen dioxide (4) CO_2

18. In which one of the following the BOD (Biochemical oxygen demand) of sewage (s), distellary effluent (DE), paper mill effluent (PE) and sugarmill effluent (SE) have been arranged in ascending order. **(AIPMT 2007)**

(1) SE < PE < S < DE (2) PE < S < SE < DE (3) S < DE < PE < SE (4) SE < S , PE < DE

19. In coal fired power plants, electrostatic precipitators are fitted to control emission of : **(AIPMT 2007)**

(1) NO_x (2) CO (3) SPM (4) SO_2

20. Which is correct **(AIPMT 2007)**

(1) Both Azotobacter and Rhizobium fix atmospheric nitrogen in root nodules of plants

(2) Cyanobacteria, Anabaena and Nostoc are mobilizers of phosphates and plant nutrition in soil

(3) At present it is not possible to grow maize without chemical fertilizers

(4) Excessive use of chemical fertilizers may lead to eutrophication of nearby water bodies

21. Which is not a bioindicator of water pollution **(AIPMT 2007)**

(1) Blood worms (2) Stone flies (3) Sewage fungus (4) Sludge worms.

22. Which one of the following is correct percentage of the two (out of the total of 4) green house gases to contribute to the total global warming. **(AIPMT 2008)**

(1) N_2O 6%, CO_2 86 % (2) Methane 20%, N_2O 18%

(3) CO_2 40%, CFC 30% (4) CFCs 14%, methane 20%

23. World summit on Sustainable Development (2002) was held in **(AIPMT 2008)**

(1) Argentina (2) Brazil (3) South Africa (4) Sweden

24. According to Central Pollution Control Board (CPCB) which particulate size in diameter (in micrometres) of the air pollutants is responsible for greatest harm to human health **(AIPMT 2008)**

(1) 1·0 or less (2) 5·2-2·5 (3) 2·5 or less (4) 1·5 or less

25. Montreal Protocol aims at **(AIPMT 2009)**

(1) Control of CO_2 emission (2) Reduction of ozone depleting substances

(3) Biodiversity conservation (4) Control of water pollution

26. Chipko movement was launched for the protection of **(AIPMT 2009)**

(1) Wet Lands (2) Grasslands (3) Forests (4) Livestock

27. The two gases making highest relative contribution to the greenhouses gases are. **(AIPMT 2010)**

(1) CH_4 and N_2O (2) CFC_S and N_2O (3) CO_2 and N_2O (4) CO_2 and CH_4

28. dB is a standard abbreviation used for the quantitative expression of **(AIPMT 2010)**
(1) A particular pollutant (2) The dominant Bacillus in a culture
(3) Certain pesticides (4) The density of bacteria in a medium

29. Eutrophication is often seen in **(AIPMT Pre. - 2011)**
(1) Deserts (2) Fresh water lakes (3) Ocean (4) Mountains

30. Which one of the following expanded forms of the following acronyms is **correct** **(AIPMT Pre. - 2011)**
(1) IPCC= International Panel for Climate Change
(2) UNEP = United Nations Environmental Policy
(3) EPA = Environmental Pollution Agency
(4) IUCN = International Union for Conservation of Nature and Natural Resources

31. Which one of following pairs of gases are the major cause of "Greenhouse effect" **(AIPMT Pre. - 2011)**
(1) CO_2 and O_3 (2) CO_2 and CO (3) CFCs and SO_2 (4) CO_2 and N_2O

32. "Good ozone " is found in the : **(AIPMT mains - 2011)**
(1) Mesosphere (2) Troposphere (3) Stratosphere (4) Ionosphere

33. Whic one of the following is a wrong statment? **(AIPMT Pre.- 2012)**
(1) Most of the forests have been lost in tropical areas.
(2) Ozone in upper part of atmosphere is harmful to animals.
(3) Greenhouse effect is a natural phenomenon.
(4) Eutrophication is a natural phenomenon in freshwater bodies.

34. Measuring Biochemical Oxygen Demand (BOD) is a method used for: **(AIPMT Pre.- 2012)**
(1) estimating the amount of organic matter in sewage water.
(2) working out the efficiency of oil driven automobile engines.
(3) measuring the activity of Saccharomyces cerevisae in producing curd on a commercial scale.
(4) working out the efficiency of RBCs about their capacity to carry oxygen.

35. The Air Prevention and Control of Pollution Act came into force in: **(NEET- 2013)**
(1) 1981 (2) 1985 (3) 1990 (4) 1975

36. Kyoto Protocol was endorsed at : **(NEET- 2013)**
(1) CoP - 5 (2) CoP - 6 (3) CoP - 4 (4) CoP - 3

37. Global warming can be controlled by: **(NEET- 2013)**
(1) Reducing reforestation, increasing the use of fossil fuel.
(2) Increasing deforestation, slowing down the growth of human population
(3) Increasing deforestation, reducing efficiency of energy usage.
(4) Reducing deforestation, cutting down use of fossil fuel.

38. A scrubber in the exhaust of a chemical industrial plant removes: **(AIPMT-2014)**
(1) Gases like sulphur dioxide
(2) Particulate matter of the size 5 micrometer or above
(3) Gases like ozone and methane
(4) Particulate matter of the size 2.5 micrometer or less

39. The zone of atmosphere in which the ozone layer is found **(AIPMT-2014)**
(1) Ionosphere (2) Mesosphere (3) Stratosphere (4) Troposphere

40. A location with luxuriant growth of lichens on the trees indicates that the: **(AIPMT-2014)**
(1) Trees are very healthy (2) Trees are heavily infested
(3) Location is highly polluted (4) Location is not polluted

41. 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? **(AIPMT-2015)**

(1) Reduced Immune System (2) Damage to eyes
(3) Increased liver cancer (4) Increased skin cancer

42. High value of BOD (Biochemical Oxygen Demand) indicates that: **(AIPMT-2015)**

(1) water is highly polluted
(2) water is less polluted
(3) consumption of organic matter in the water is higher by the microbes
(4) water is pure

43. Rachel Carson's famous book "Silent Spring" is related to: **(AIPMT-2015)**

(1) Noise pollution (2) Population explosion
(3) Ecosystem management (4) Pesticide pollution

44. Depletion of which gas in the atmosphere can lead to an increased incidence of skin cancers: **(NEET-1-2016)**

(1) Methane (2) Nitrous oxide (3) Ozone (4) Ammonia

45. Joint Forest Management Concept was introduced in India during: **(NEET-1-2016)**

(1) 1990s (2) 1960s (3) 1970s (4) 1980s

46. Which one of the following characteristics is not shared by birds and mammals? **(NEET-1-2016)**

(1) Warm blooded nature (2) Ossified endoskeleton
(3) Breathing using lungs (4) Viviparity

47. Biochemical Oxygen Demand (BOD) may not be good index for pollution for water bodies receiving effluents from **(NEET-2-2016)**

(1) sugar industry (2) domestic sewage (3) dairy industry (4) petroleum industry

48. The highest DDT concentration in aquatic food chain shall occur in **(NEET-2-2016)**

(1) eel (2) phytoplankton (3) seagull (4) crab

49. Which of the following sets of diseases is caused by bacteria? **(NEET-2-2016)**

(1) Herpes and influenza (2) Cholera and tetanus
(3) Typhoid and smallpox (4) Tetanus and mumps

50. Which one of the following statements in not valid for aerosols **(NEET-2017)**

(1) They are harmful to human health
(2) They alter rainfall and monsoon patterns
(3) They cause increased agricultural productivity
(4) They have negative impact on agricultural land

51. Match the items given in Column I with those in Column II and select the *correct* option given below: **(NEET-2018)**

Column I		*Column II*	
a.	Eutrophication	i.	UV-B radiation
b.	Sanitary landfill	ii.	Deforestation
c.	Snow blindness	iii.	Nutrient enrichment
d.	Jhum cultivation	iv.	Waste disposal

	a	**b**	**c**	**d**
(1)	ii	i	iii	iv
(2)	i	ii	iv	iii
(3)	iii	iv	i	ii
(4)	i	iii	iv	ii

52. Which of the following is a secondary pollutant? **(NEET-2018)**
(1) CO (2) O_3 (3) SO_2 (4) CO_2

53. World Ozone Day is celebrated on **(NEET-2018)**
(1) 5th June (2) 22nd April (3) 16th September (4) 21st April

54. In stratosphere, which of the following elements acts as a catalyst in degradation of ozone and release of molecular oxygen? **(NEET-2018)**
(1) Carbon (2) Oxygen. (3) Fe (4) Cl

55._ Which of these following methods is the suitable for disposal of nuclear waste? **(NEET-1-2019)**
(1) Bury the waste within rocks deep below Earth's surface
(2) Shoot the waste into space
(3) Bury the waste under Antarctic ice-cover
(4) Dump the waste within rocks under ocean

56. Which of the following pairs of gases is mainly responsible for green house effect? **(NEET-1-2019)**
(1) Carbon dioxide and Methane (2) Ozone and Ammonia
(3) Oxygen and Nitrogen (4) Nitrogen and Sulphur dioxide

57. Polyblend, a fine powder of recycled modified plastic, has proved to be a good material for: **(NEET-1-2019)**
(1) making tubes and pipes (2) making plastic sacks
(3) use as a fertilizer (4) construction of roads

58. Which of the following protocols did aim reducing emission of chlorofluorocarbons into atmosphere? **(NEET-1-2019)**
(1) Geneva Protocol (2) Montreal Protocol
(3) Kyoto Protocol (4) Gothenburg Protocol

59. Which of the following statements about ozone is correct ? **(NEET-2-2019)**
(1) Tropospheric ozone protects us from UV radiations.
(2) Stratospheric ozone is 'bad'.
(3)Tropospheric ozone is 'good'.
(4) Stratospheric ozone protects us from UV radiations.

60. Which of the following is an innovative remedy for plastic waste ? **(NEET-2-2019)**
(1) Burning in the absence of oxygen (2) Burrying 500 m deep below soil surface
(3) Polyblend (4) Electrostatic precipitator

61. If an agricultural field is liberally, irrigated for a prolonged period of time, it is likely to face a problem of : **(NEET-2-2019)**
(1) Metal toxicity (2) Alkalinity (3) Acidity (4) Salinity

PART - II : AIIMS QUESTION (PREVIOUS YEARS)

1. A person has impaired nervous system and sign of madness due to continued intake of metal contaminated water. The metal is : **(AIIMS 2000)**
(1) Mercury (2) Calcium (3) Manganese (4) Lead

2. Fertilisers added to fresh water will cause **(AIIMS 2002)**
(1) Death of plants (2) Decrease in fish population
(3) Increase in aquatic animals (4) Eutrophication

3. BOD is measure of **(AIIMS 2003)**
(1) Industrial waste being poured in water body (2) Extent of pollution with organic compounds
(3) CO combined with haemoglobin (4) O_2 required by green plants during night

4. Drinking mineral water with low levels (~ 0.02 ppm) of pesticide for long period would **(AIIMS 2003)**
(1) Cause cancer of intestine (2) Pesticide accumulation in the body
(3) Cause leukaemia (4) Produce immunity against mosquito

5. Nitrogen oxides formed during emission from automobiles and power plants are a source of fine air particles which lead to **(AIIMS 2004)**
(1) Dry acid deposition (2) Photochemical smog
(3) Wet acid deposition (4) Industrial smog

6. Which one of the following statements pertaining to pollutant is correct? **(AIIMS-2005)**
(1) DDT is nonbiodegradable pollutant
(2) Excess fluoride in drinking water causes osteoporosis
(3) Excess cadmium in drinking water may cause black foot disease
(4) Methyl mercury in water may cause ''itai itai'' disease.

7. Formation of nonfunctional methaemoglobin causes blue baby syndrome. This is due to **(AIIMS-2005)**
(1) Excess of arsenic in drinking water
(2) Excess of nitrate in drinking water
(3) Deficiency of iron in food
(4) Increased methane content in atmosphere

8. Which one of the following is an environment related disorder with correct main cause **(AIIMS-2006)**
(1) Black lung disease is found mainly in workers of stone quarries and crushers
(2) Blue-baby disease is due to heavy use of nitrogenous fertilizers
(3) Non-Hodgkin's lymphoma is found mainly in worker involved in manufacture of neem-based pesticides
(4) Skin cancer occurs mainly in people exposed to benzene and methane

9. Montreal Protocol refers to **(AIIMS-2006)**
(1) Substances that deplete ozone layer
(2) Persistent organic pollutants
(3) Global warming and climate change
(4) Biosafety of genetically modified organisms

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. **(AIIMS-2007)**
(1) Primary treatment (2) Tertiary treatment
(3) Activated sludge treatment (4) Cyclic treatment

11. A lake with an inflow of domestic sewage rich in organic waste may result in **(AIIMS-2007)**
(1) An increased production of fishes due to lot of nutrients
(2) Death of fishes due to lack of oxygen
(3) Drying of the lake very soon due to algal bloom
(4) Increased population of aquatic food web organisms

12. In almost all Indian metropolitan cities like Delhi, the major atmospheric pollutant (s) is/are **(AIIMS-2008)**
(1) Oxides of sulphur (2) Carbon dioxide and carbon monoxide
(3) Suspended particulate matter (SPM) (4) Oxides of nitrogen

13. Rain is called acid-rain when its pH is below **(AIIMS-2009)**
(1) 7 (2) 6.5 (3) 6 (4) 5.6

14. In the environment, ozone is known for its **(AIIMS-2013)**
(1) Harmful effects (2) Useful effects (3) Both (1) and (2) (4) Inert nature

15. If the Bengal tiger becomes extinct **(AIIMS-2013)**
(1) Hyenas and wolves will become scarce
(2) The wild area will be safe for man and domestic animals
(3) Its gene pool will be lost for ever
(4) The population of beautiful animals like deers will be stabilized.

16. Which one of the following statement is true? **(AIIMS 2013)**
(1) The greater the BOD of waste water, more is its polluting potential.
(2) The greater the BOD of waste water, less is its polluting potential.
(3) The lesser the BOD of waste water, more is its polluting potential.
(4) The lesser the BOD of waste water, less is its polluting potential.

17. Which one of the following pairs is mismatched? **(AIIMS 2013)**
(1) Fossil fuel burning – release of CO_2
(2) Nuclear power – radioactive wastes
(3) Solar energy – green house effect
(4) Biomass burning – release of CO_2

18. Plants do not get benefit from **(AIIMS 2014)**
(1) N_2 in air (2) O_2 in air (3) CO_2 in air (4) O_3 in air

19. Photochemical smog formed in congested metropolitan cities mainly consists of **(AIIMS 2014)**
(1) ozone, peroxyacyl nitrate and NO_2
(2) smoke, peroxyacyl nitrate and SO_2
(3) hydrocarbons, SO_2 and CO_2
(4) hydrocarbons, ozone and SO_2

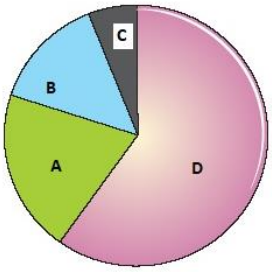
20. One green house gas contributes 14% to total global warming and another contributes 6%. These are respectively identified as **(AIIMS 2016)**
(1) N_2O and CO_2 (2) CFCs and N_2O
(3) Methane and CO_2 (4) Methane and CFCs

21. Which one option is incorrectly matched regarding biological magnification of DDT in aquatic ecosystem? **(AIIMS-2017)**

(1) Small fish - 0.5 ppm
(2) Large fish - 2ppm
(3) Fish-eating birds - 25 ppm
(4) Zooplankton - 0.003 ppm

22._ Which of the following is not related with electrostatic preciptator and scrubber **(AIIMS-I-2018)**
(1) 99 % particulate matter is removed by it (2) SO_2
(3) Vapours containing mercury (4) Oxides of nitrogen

23._ Which one of the following options correctly designate the per cent contribution of gases (A, B, C and D) responsible of global warming? **(AIIMS-II-2018)**



	A	B	C	D
(1)	CH_4 (20%)	CFC_S (14%)	N_2O (6%)	CO_2 (60%)
(2)	CFC_S (20%)	CO_2 (14%)	N_2O (6%)	CH_4 (60%)
(3)	N_2O (20%)	CH_4 (14%)	CFC_S (6%)	CO_2 (60%)
(4)	CH_4 (20%)	N_2O (14%)	CFC_S (6%)	CO_2 (60%)

24._ Bio magnification refers to: **(AIIMS-III-2018)**
(1) Breeding of crops that are rich in minerals and vitamins, good proteins and healthier fats for human health
(2) Increase in concentration of the toxicant at successive trophic levels.
(3) Exploring at molecular, Genetic and species level diversity for the products of economic importance
(4) Decomposition of organic waste in water by the action of microbes

25._ Lichens are best indicator of – **(AIIMS-III-2018)**
(1) Air pollution (2) Water pollution (3) Soil pollution (4) Noise pollution

26._ Fishes in eutrophic lake is died due to **(AIIMS-IV-2018)**
(1) Oxygen (2) Nutrient enrichment (3) CO_2 (4) None

27. Which gases are responsible for increasing the temperature of atmosphere? **(AIIMS-IV-2019)**
(1) CO, NO_2, H_2S (2) CO_2, CO, NO (3) CH_4, CO_2, N_2O (4) NO_2, H_2S, CO_2

Answers

EXERCISE - 1

SECTION - A

1.	(4)	**2.**	(1)	**3.**	(1)	**4.**	(2)	**5.**	(1)	**6.**	(1)	**7.**	(4)
8.	(4)	**9.**	(2)	**10.**	(1)	**11.**	(1)	**12.**	(1)	**13.**	(3)	**14.**	(4)
15.	(1)	**16.**	(3)	**17.**	(2)	**18.**	(2)	**19.**	(1)	**20.**	(3)	**21.**	(4)
22.	(2)	**23.**	(3)	**24.**	(3)	**25.**	(4)	**26.**	(1)	**27.**	(3)	**28.**	(2)
29.	(2)	**30.**	(4)	**31.**	(1)	**32.**	(1)	**33.**	(2)	**34.**	(3)	**35.**	(2)
36.	(2)	**37.**	(1)	**38.**	(4)	**39.**	(4)	**40.**	(3)	**41.**	(1)	**42.**	(1)
43.	(2)	**44.**	(1)	**45.**	(4)	**46.**	(2)	**47.**	(2)	**48.**	(3)		

SECTION - B

1.	(4)	**2.**	(4)	**3.**	(2)	**4.**	(4)	**5.**	(1)	**6.**	(2)	**7.**	(2)
8.	(4)	**9.**	(1)	**10.**	(2)	**11.**	(2)	**12.**	(4)	**13.**	(1)	**14.**	(4)
15.	(2)	**16.**	(3)	**17.**	(2)								

MISCELLANEOUS QUESTIONS

1.	(1)	**2.**	(1)	**3.**	(1)	**4.**	(3)	**5.**	(2)	**6.**	(1)	**7.**	(2)
8.	(4)	**9.**	(4)	**10.**	(4)	**11.**	(3)	**12.**	(3)	**13.**	(2)	**14.**	(2)
15.	(4)	**16.**	(1)	**17.**	(1)	**18.**	(3)	**19.**	(4)	**20.**	(1)	**21.**	(4)
22.	(4)	**23.**	(3)	**24.**	(2)	**25.**	(4)	**26.**	(4)	**27.**	(3)	**28.**	(3)
29.	(3)	**30.**	(3)	**31.**	(1)	**32.**	(1)	**33.**	(4)				

EXERCISE - 2

1.	(3)	**2.**	(2)	**3.**	(2)

EXERCISE - 3

PART- I

1.	(2)	**2.**	(3)	**3.**	(2)	**4.**	(2)	**5.**	(3)	**6.**	(4)	**7.**	(1)
8.	(4)	**9.**	(3)	**10.**	(4)	**11.**	(3)	**12.**	(2)	**13.**	(4)	**14.**	(3)
15.	(3)	**16.**	(4)	**17.**	(4)	**18.**	(2)	**19.**	(3)	**20.**	(4)	**21.**	(2)
22.	(4)	**23.**	(3)	**24.**	(3)	**25.**	(2)	**26.**	(3)	**27.**	(4)	**28.**	(1)
29.	(2)	**30.**	(4)	**31.**	(4)	**32.**	(3)	**33.**	(2)	**34.**	(1)	**35.**	(1)
36.	(4)	**37.**	(4)	**38.**	(1)	**39.**	(3)	**40.**	(4)	**41.**	(3)	**42.**	(1)
43.	(4)	**44.**	(3)	**45.**	(4)	**46.**	(4)	**47.**	(4)	**48.**	(3)	**49.**	(2)
50.	(3)	**51.**	(3)	**52.**	(2)	**53.**	(3)	**54.**	(4)	**55._**	(1)	**56.**	(1)
57.	(4)	**58.**	(2)	**59.**	(4)	**60.**	(3)	**61.**	(3)				

PART- II

1.	(4)	**2.**	(4)	**3.**	(2)	**4.**	(2)	**5.**	(2)	**6.**	(1)	**7.**	(2)
8.	(2)	**9.**	(1)	**10.**	(3)	**11.**	(2)	**12.**	(2)	**13.**	(4)	**14.**	(3)
15.	(3)	**16.**	(1)	**17.**	(3)	**18.**	(4)	**19.**	(1)	**20.**	(2)	**21.**	(4)
22.	(3)	**23.**	(1)	**24.**	(2)	**25.**	(1)	**26.**	(1)	**27.**	(3)		