

Duration: 3 Hours

Maximum Marks: 100

- Q.1 A) Fill in the blanks: 4
- i) The presence of _____ in atmosphere is due to photosynthesis.
 - ii) The boundary between stratosphere and mesosphere is called _____.
 - iii) The reflecting capacity of the earth is called _____.
 - iv) The major anthropogenic source of nitrogen oxides is _____.
- Q.1 B) Write a short note on : (Any one) 4
- i) Particles, ions and radicles in the atmosphere.
 - ii) Depletion of ozone.
- Q.1 C) Answer the following: (Any two) 12
- i) With the help of a neat labelled diagram discuss temperature profile of atmosphere.
 - ii) Elaborate on fate of oxides of sulphur in atmosphere.
 - iii) Construct a detailed note on reactions of oxygen and ozone in the atmosphere.
- Q.2 A) Fill in the blanks: 4
- i) _____ of water on earth is available as fresh water.
 - ii) The depletion of _____ affects aquatic biota severely.
 - iii) Sedimentation is a part of _____ treatment of waste water.
 - iv) The cause of Minamata disease was contamination of water with _____.
- Q.2 B) Write a short note on : (Any one) 4
- i) Oil spill
 - ii) Water cycle
- Q.2 C) Answer the following: (Any two) 12
- i) Elaborate on the organic pollutants of water.
 - ii) Write in detail about tertiary treatment of waste water.
 - iii) Discuss the criteria for purity of water.
- Q.3 A) Fill in the blanks: 4
- i) _____ convert ammonium ions into nitrite ions.
 - ii) Excessive use of inorganic fertilizers leads to _____ of soil.
 - iii) The unit of measuring sound frequency is _____.
 - iv) The soil without living organisms is called _____.
- Q.3 B) Write a short note on : (Any one) 4
- i) Soil profile
 - ii) Agrochemical pollution

- Q.3 C) Answer the following: (Any two) 12
- i) Give detailed account of classification of noise.
Discuss the necessity of biogeochemical cycles with special reference to
 - ii) nitrogen cycle.
 - iii) Justify. Soil is the most susceptible element of the environment to pollution.
- Q.4 A) Fill in the blanks: 4
- i) The energy associated with carbon and hydrogen bonds present in vegetative material is _____.
 - ii) _____ energy is non-conventional source useful for cities near sea.
 - iii) The ground water entering the closed mine carries with it a mixture of _____ minerals. .
 - iv) The floating precipitate of iron (III) oxide on the surface of natural aquatic systems is called _____.
- Q.4 B) Write a short note on : (Any one) 4
- i) Coal and coke
 - ii) Polymers and plastics
- Q.4 C) Answer the following : (Any two) 12
- i) Give comparative account of conventional and nonconventional sources of energy.
 - ii) Construct a note on monitoring of water pollutants stating the principle and significance of it.
 - iii) Discuss approaches for environmental monitoring in detail.
- Q.5A) Define/explain: (Any four) 8
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|--------------------|----|-----------------------|
| a) Van Allen belts | OR | b) Deforestation |
| c) Screening | OR | d) Surfactants |
| e) Acidification | OR | f) Occupational noise |
| g) Asbestosis | OR | h) SNG |
- Q.5 B) State true or false giving reasons: 12
- i) Ozone is present in troposphere .
 - ii) Asbestos is used in textile industry.
 - iii) Solubility of nitrogen increases with increasing temperature.
 - iv) Alum is used as flocculating agent.
 - v) Normal hearing audio range is 2Hz -22000HZ.
 - vi) Soils with low cation exchange capacity retain metals leading to soil pollution.