

09/05/2025

Printing Pages : 2

Paper Code: B150401T

B (SVSU:2024-25/R)

Enrollment No.

Program Name: B.Sc. Environmental Science

IV Semester / II Year Examination

Subject Name: Environmental Pollution & Management

Subject Code: B150401T

[Time : 03:00 Hours]

[Max. Marks : 75]

Note : Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs)

[01×15=15]

- I Which one of the following is not a greenhouse gas found naturally in the atmosphere?
(a) Nitrogen oxide (b) Carbon dioxide (c) Methane (d) Ozone
- II Chlorofluorocarbons (CFCs) are known as _____.
(a) Chlorocarbon (b) Fluoromethane (c) Anisol (d) Freon
- III Which of the following is non-biodegradable?
(a) Wool (b) Nylon (c) Animal bones (d) Tea leaves
- IV Land pollution in which land is unsuitable for farming due to high salt content is known as:
(a) Desertification (b) Salinization (c) Carbonization (d) Oxygenation
- V Which of the following is not a major pollution which causes soil pollution?
(a) Heavy metals (b) Mineral oil (c) Nitrogen oxides (d) Hydrocarbons
- VI Which of the following is not a source of pollution in soil?
(a) Transport sector (b) Agriculture sector (c) Thermal power plants (d) Hydropower plants
- VII Which of the following processes can effectively remove hardness from groundwater?
(a) Boiling and aeration (b) Filtration and sedimentation
(c) Ion-exchange and reverse osmosis (d) Chlorination and UV treatment
- VIII Groundwater is especially prone to excessive hardness due to
(a) Calcium and sodium ions (b) Calcium and Magnesium ions
(c) Sodium and Magnesium ions (d) Potassium and Calcium ions
- IX Which of the following is not a water pollutant?
(a) Chromium (b) Silt (c) Glacier (d) Arsenic
- X Which of the following is not a primary air pollutant?
(a) CO (b) NO (c) O₃ (d) SO₂

- XI** What is the full form of POPs?
 (a) Persistent Organic Pollutants (b) Persistent Oxygenated Pollutants
 (c) Polycyclic Organic pollutants (d) Polymerized Organic Pollutants
- XII** Which of the following is a type of air pollution that can cause respiratory problems?
 (a) Smog (b) Acid rain (c) Eutrophication (d) None of the above
- XIII** Which of the following zones are correctly matched with their permitted noise level units?
 (a) Industrial---90 dB (b) Commercial---75dB
 (c) Residential---Silence zone (d) None of the above
- XIV** A 30 dB increase in noise pollution level represents:
 (a) 30 fold increase in sound intensity
 (b) 100 fold increase in sound intensity
 (c) 1000 fold increase in sound intensity
 (d) 15 fold increase in sound intensity
- XV** Identify the health effects related to noise pollution
 (a) Speech Interference (b) Hearing loss
 (c) Hypertension (d) All of the above

2. Answer in long (any three) [10×3=30]

- I** Write a short note on Soil pollution.
- II** What do you mean by environmental pollution? What are its types?
- III** What is noise pollution, thermal pollution, and radioactive pollution?
- IV** Discuss the drinking water quality standards and their parameters.

3. Answer in short (any five) [6x5=30]

- I** Define the terms: a) COD, b) BOD
- II** What is solid waste pollution? Give a detailed account.
- III** What are greenhouse effect and ozone depletion? Discuss it.
- IV** Give a brief history on noise pollution.
- V** What do you mean by composting and vermicomposting? Briefly discuss on it.
- VI** Briefly describe about the factors affecting distribution of air pollution.
- VII** Discuss about eutrophication and algal bloom.

Printing Pages : 2

Paper Code: B150201T

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(SVSU:2024-25/R)

Enrollment No.

Program Name: B.Sc. Environmental Science

IInd Semester / 1st Year Examination

Subject Code: B150201T

Subject Name: Environmental Biology

[Time : 03:00 Hours]

[Max. Marks : 75]

Note : 1. Attempt all the questions as per given instructions.

1. **Multiple Choice Questions (MCQs)** [01×15=15]
 - I Which of the following requires maximum energy?
 - (a) Secondary consumer
 - (b) Decomposer
 - (c) Primary consumer
 - (d) Primary producer
 - II What is the process of converting nitrates to nitrogen called?
 - (a) Ammonification
 - (b) Nitrification
 - (c) Nitrogen fixation
 - (d) Denitrification
 - III A mutual relationship between two organisms, where both of them are benefitting from watching the other is called:
 - (a) Mutualism
 - (b) Symbiosis
 - (c) Parasitism
 - (d) Food chain
 - IV The set of ecosystems is called _____.
 - (a) Atmosphere
 - (b) Hydrosphere
 - (c) Biome
 - (d) None of the above
 - V The natural place of an organism or community is known as
 - (a) Niche
 - (b) Biome
 - (c) Habitat
 - (d) Habit
 - VI Which is not the characteristic of a population?
 - (a) Natality
 - (b) Mortality
 - (c) Stratification
 - (d) Sex ratio
 - VII In which form do plants absorb nitrogen?
 - (a) Ammonium
 - (b) Nitrites
 - (c) Nitrates
 - (d) All of the above
 - VIII Name the Process by which carbon return to the atmosphere as CO₂?
 - (a) Calcareous Sediments
 - (b) Decayed Organism
 - (c) Respiration
 - (d) Photosynthesis
 - IX Plant species with a wide range of genetic distribution evolve into a local population known as
 - (a) Ecotype
 - (b) Population
 - (c) Ecosystem
 - (d) Biome
 - X A wide variety of living organisms is called:
 - (a) Biodiversity
 - (b) Population
 - (c) Habitat
 - (d) Diversity
 - XI Mention the Human Activities that significantly influenced the Carbon Cycle?
 - (a) Deforestation only
 - (b) Afforestation
 - (c) Both deforestation and Burning of Fossil Fuel
 - (d) Burning of Fossil Fuel only

- XII** In ecological succession, the intermediate developmental phase is known by what name?
(a) ecesis (b) climax (c) nudation (d) sere
- XIII** Which one is a 'K' selected species?
(a) Aspergillus (b) Human (c) Taraxacum (d) Grass
- XIV** In an ecosystem, the energy flow is always
(a) Always unidirectional (b) Always bidirectional
(c) In any direction (d) Always down directional
- XV** Which is the renewable exhaustible natural energy resource?
(a) Coal (b) Petroleum (c) Kerosene (d) Biomass

2. Answer in long (any three) [10×3=30]

- I** Define Ecosystem. Give the classification of ecosystem in detail.
- II** Briefly explain various characteristic of population.
- III** What is biogeochemical Cycles? Explain carbon cycle in detail.
- IV** What is food web? Discuss different trophic levels in a food chain.

3. Answer in short (any five) [6x5=30]

- I.** What do you understand by natality and mortality?
- II.** Discuss ecological indicators.
- III.** Differentiate between ecological niche and habitat.
- IV.** How would you differentiate between ecotone, ecotypes and ecophene.
- V.** Write a note on positive interaction among organisms.
- VI.** What are keystone species? Discuss in brief.
- VII.** Discuss briefly oxygen and carbon cycle in nature.