

**PGIS - 1079 B - 15**  
**M.Sc. Ist Semester Degree Examination**  
**Environmental Science**  
**(Fundamentals of Environmental Science)**  
**Paper : HCT 1.1**

Time : 3 Hours

Maximum Marks : 80

**Instructions to Candidates:**Answer questions from **ALL** sections.**SECTION - A**Write answer in one sentence to all **Ten** of the following.**(10×1=10)**

1. Ecological niche
2. Convection of energy
3. Water cycle
4. Biome
5. Mantle
6. Fluorosis
7. Water cycle
8. Ecological vents
9. Non point source
10. Biodiversity

**SECTION - B**Answer any **FIVE** of the following**(5×3=15)**

11. Explain the sources of water pollution
12. Give an account of free market environmentalism.
13. What are the potential challenges to environment?
14. Explain the disciplines associated with human ecology
15. Highlight the significance of environmental pollution control
16. Define different types of rocks.

### SECTION - C

Answer any **FIVE** of the following.

(5×7=35)

17. Explain the facets of environment
18. Illustrate the structure of earth's crust.
19. Write a note on environmental ethics.
20. Explain water budget and its significance.
21. Explain in brief atmospheric layers.
22. How GIS is applied for monitoring of environmental disasters?

### SECTION - D

Answer any **TWO** of the following.

(2×10=20)

23. Discuss the man made disasters and their impact on environment.
  24. Describe properties types of soils and their environmental significance.
  25. Give an account of the biosphere and its importance.
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**PGIS 1080 B-15**  
**M.Sc. Ist Semester Degree Examination**  
**Environmental Science**  
**(Earth and Environment)**  
**Paper : HCT 1.2**

Time : 3 Hours

Maximum Marks : 80

**Instructions to Candidates:**Answer questions from **ALL** Sections.**SECTION - A**

Answer the following in brief.

**(10×1=10)**

1. Stratosphere
2. Metamorphic rocks
3. Silicates
4. Bioremediation
5. Quartzite
6. Wind
7. Air spraying
8. Coal
9. Seismograph
10. Wetland.

**SECTION - B**Answer any **FIVE** of the following**(5×3=15)**

11. Elemental composition of earth crust.
12. Mineral resources.
13. Cyclones

14. Soil erosion
15. Soil vapor extraction
16. Earth quake process

### SECTION - C

Answer any **FIVE** of the following.

(5×7=35)

17. Geochemical features
18. Soil conservation methods
19. Role of soil organisms in soil formation
20. Ground water remediation techniques.
21. Volcanic activities.
22. Environmental aspects of terrain formation.

### SECTION - D

Answer any **TWO** of the following.

(2×10=20)

23. Give an account of interactions between atmosphere, hydrosphere and biosphere.
  24. Write in detail on natural disaster mitigation measures.
  25. Give an account of exogenic process of earth.
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**PGIS 1081 B - 15**  
**M.Sc. Ist Semester Degree Examination**  
**Environmental Science**  
**(Environmental Chemistry)**  
**Paper : HCT - 1.3**

Time : 3 Hours

Maximum Marks : 80

**Instructions to Candidates:**Answer questions from **ALL** Sections.**SECTION - A**Answer **ALL** questions**(10×1=10)**

1. Fog
2. Ozone
3. Hardness of water
4. Fluorosis
5. BOD
6. Acidity
7.  $PM_{2.5}$
8.  $LD_{50}$
9. E coli
10. Redox

**SECTION - B**Answer any **FIVE** of the following**(5×3=15)**

11. What are carcinogens?
12. Write a note on toxicity of lead
13. Name the sources oil pollution in sea
14. Write note on CFC's.
15. Name the sources and causes of organic pollutants.
16. What are xenobiotics?

## SECTION - C

Answer any **FIVE** of the following.

(5×7=35)

17. Explain the source and causes of carbon monoxide?
18. Explain chemistry of acid rain formation
19. Explain the physical property of water
20. Write a note on corrosion process.
21. Give details on biochemical effect of mercury.
22. Give details on organophosphorous pesticides.

## SECTION - D

Answer any **TWO** of the following.

(2×10=20)

23. Discuss the source and causes of heavy metal pollution
  24. Discuss the chemical composition of air.
  25. With suitable example explain dose response relationship reaction.
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**PGIS 1082 B-15**  
**M.Sc. Ist Semester Degree Examination**  
**Environmental Science**  
**(Environmental Biology)**  
**Paper : SCT - 1.1**

Time : 3 Hours

Maximum Marks : 80

**Instructions to Candidates:**

Answer questions from All sections.

**SECTION - A****I Define the All of the following. (10×1=10)**

1. Biome
2. National Park
3. MPN
4. GMOs
5. Bio-diversity
6. Keystone species
7. Bio-corrosion
8. Bioassay
9. Aeroallergens
10. Mortality

**SECTION - B****II Write a brief note on any FIVE of the following (5×3=15)**

11. Spoilage of food
12. Species dominance
13. Flagship species
14. Sacred grooves
15. Micro fauna
16. Bio-film

### SECTION - C

III Answer any **FIVE** of the following.

(5×7=35)

17. Write a note on ecological indicators.
18. Describe the MPN technique.
19. Write a note on Hospital infections.
20. Write an account of Tropical rain forests.
21. Describe the energy flow models.
22. Write the characteristics of population ecology.

### SECTION - D

IV Answer any **TWO** of the following.

(2×10=20)

23. Discuss the influence of forest on climate regulation.
  24. Write the importance of Environmental Biotechnology.
  25. Discuss the relation between Man and Environment.
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