

PGIS 1101B-2K13

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 form **all** sections.**Section - A**Answer all **ten** questions.**(10x1=10)**

1. Biosphere
2. Soil profile
3. Water cycle
4. Thermosphere
5. Floods
6. Remote sensing
7. Natural resources
8. Earth radiation
9. GIS
10. Socio - environmental impact.

Section - BAnswer any **five** of the following**(5x3=15)**

11. Write a brief account on the rock cycle.
12. Give an account of atmospheric layers

13. Write a note on environmental ethics.
14. Write an account on the components of biosphere
15. Give an account of out door pollution
16. Discuss briefly the sources of environmental problems

Section - C

Answer any **five** of the following

(5x7=35)

17. Write an account on the properties of water. Add a note on the water budget
18. Define human ecology? Briefly explain the disciplines associated with human ecology
19. Define soil erosion? Explain measures to check soil erosion
20. Give a detailed account of water resources. Add a note on water budget.
21. Define Biodiversity. Explain the importance of biodiversity
22. Explain briefly the renewable and non renewable sources of energy.

Section - D

Answer any **two** of the following

(2x10=20)

23. Describe in detail the free market environmentalism with special reference to agriculture.
 24. Write short notes on;
 - a) Non - point sources of water pollution
 - b) Environmental Ethics
 25. What is natural disaster? Describe in detail the monitoring and management of natural disaster in the environment.
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PGIS 1104 B-2K13**M.Sc Ist Semester Degree Examination****Environmental Science****(Environmental Biology)****Paper -SCT-1.1**

Time : 3 Hours

Maximum Marks :80

Instructions to candidates:

1. Answer questions from all sections.

Section - A

Answer all ten questions.

(10x1=10)

1. Population ecology
2. Producers
3. Net Primary Productivity (NPP)
4. Biodiversity
5. Soil erosion
6. Ecotones & Edge effect
7. Food spoilage
8. Acid Rock Drainage (ARD)
9. Biomes
10. Wild life habitat

Section - B

Answer any five of the following

(5x3=15)

11. Explain the relation between Man and Environment?
12. Discuss Species diversity?

13. Explain about the energy flow in Forest ecosystem?
14. Explain Bio - fouling?
15. How to prevent microbial contamination in hospitals?
16. Explain the importance of sacred grooves?

Section - C

Answer any **five** of the following

(5x7=35)

17. Explain the scope of environmental science.
18. What is meant by productivity, explain it in grassland ecosystem.
19. Discuss the importance of carbon sequestration.
20. Write a note on water borne diseases and their control measures
21. Discuss MPN test and MF technique.
22. Explain Oils spill degradation.

Section - D

Answer any **two** of the following

(2x10=20)

23. Discuss the different types of major biomes of the world
 24. What is Bio diversity? Explain in-situ and ex - situ conservation
 25. Write short notes on .
 - a) Factors influencing the spoilage of food
 - b) Bioassay.
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PGIS 1102 B-2K13**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 all ten questions.

(10x1=10)

1. Asthenosphere
2. Stratopause
3. Biosphere
4. Magma
5. Epicentre
6. Tsunami
7. Pedon
8. Groundwater table
9. Mineral
10. Geomorphology

Section - BAnswer any **five** of the following**(5x3=15)**

11. Soil Humification
12. Cyclones

13. Earth crust
14. Riverine floods
15. Chemical composition of air
16. Water logging

Section - C

Answer any **five** of the following

(5x7=35)

17. Explain Hydrologic cycle and its importance
18. Classify the Rocks with suitable examples
19. Explain phytoremediation techniques of soil contaminants
20. Write note on soil erosion and its control measures.
21. Impact of Natural disasters on flora and fauna
22. Importance of Exogenic process on landscape forming on the earth

Section - D

Answer any **two** of the following

(2x10=20)

23. Explain various types of Mineral resources. Add a note on the depletion of natural resources
 24. Explain the process of soil formation and role of soil organisms in maintaining soil health
 25. Describe the process and criteria for site selection and evaluation of land for sustainable land use planning.
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PGIS 1103 B-2K13**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 **ten** questions**(10×1=10)**

1. Atmospheric chemistry
2. Particles in the atmosphere
3. Ozone chemistry
4. PAN
5. Receptor sites
6. Microsomal Oxidation
7. Radiation pollution
8. Organic Particulate Matter.
9. Toxicants
10. Xenobiotics

Section - BAnswer any **five** of the following**(5×3=15)**

11. Explain briefly the chemical speciation.
12. Give the classification of elements.
13. Write a note on toxic chemicals in the environment.
14. Give an account of biochemical aspects of lead.
15. Explain the absorption and storage of xenobiotics
16. Write a note on organic pollution.

Section - C

Answer any **five** of the following

(5×7=35)

17. Write briefly the thermo chemical reactions involved in the atmosphere.
18. Discuss the role of CFC's in reducing ozone layer
19. Give the antidotal procedures in toxicology.
20. Explain briefly the electrochemical theory of corrosion?
21. What is water pollution? Enumerate the properties of water.
22. Discuss briefly on dose-response relationship in chemical toxicology.

Section - D

Answer any **two** of the following

(2×10=20)

23. Explain in detail the biotransformation of organochlorine and organophosphorous.
24. Write a note on:
 - i) Photochemical smog formation
 - ii) Biochemical aspects of mercury
25. Describe in detail the different types of radio-active reactions in marine water bodies?