

PGIS 1097 B- 14
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 question from ALL sections

SECTION - A

Answer all **TEN** questions.

(10 × 1 = 10)

1. Cost - Benefit Analysis
2. Ionosphere
3. Volcano
4. Environmental ethics.
5. Thermocline
6. Soil erosion
7. Species richness
8. Adaptation.
9. Cyclone
10. Conduction.

SECTION - B

Answer any **FIVE** questions.

(5 × 3 = 15)

11. Explain energy transfer in atmosphere.
12. Mention different branches of human ecology.
13. What is social environment?

14. Rock cycle.
15. Different biome and biosphere
16. Application of GIS

SECTION - C

Answer any **FIVE** questions.

(5 × 7 = 35)

17. Explain water cycle with neat diagram
18. What are the causes and control measure of forest fire.
19. Explain the sustainable management of natural resources.
20. Give an account of man made disturbances
21. Explain free market environmentalism.
22. Give an account of properties of water.

SECTION - D

Answer any **Two** questions.

(2 × 10 = 20)

23. Explain the application of remote sensing in natural disaster management.
 24. Discuss the scope of environmental science.
 25. Explain structure and super structure of ecosystem.
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PGIS 1100 B-14
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

I Answer all the questions

(10x1=10)

1. Heterotrophes

2. Food chain

3. Savanna

4. Habitat

5. Ecological dominance

6. Wildlife

7. Greenbelt

8. Species diversity

9. Natality

10. Population

Section-B

Answer any **five** of the following

(5x3=15)

11. Biofouling
12. MPN techniques.
13. Bio assay
14. Endemic species
15. Keystone species
16. Law's of thermodynamics

Section-C

Answer any five of the following

(5x7=35)

17. Give an account on physical & chemical factors affecting the environment
18. Write a note on structure and function of ecosystem
19. Explain measurement of biomass & productivity in terrestrial community
20. Explain carbon sequestration.
21. Explain sampling techniques of microbes
22. Discuss the factors influencing the spoilage of food

Section-D

Answer any two of the following

(2x10=20)

- ~~23~~ Write a essay on fermentation technology
 - ~~24~~ Discuss the hot spots of India. Add a note on conservation strategies of biodiversity
 - ~~25~~ Describe the characteristics of population
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PGIS 1098 B- 14
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.**(10 × 1 = 10)**

1. Terrain
2. Minerals
3. Bioremediation
4. Lithosphere
5. Environment
6. Excavation
7. Glaciers
8. Tsunami
9. Seisonics
10. Hydrosphere

SECTION - BAnswer any **FIVE** questions.**(5 × 3 = 15)**

11. Endogenic earths process
12. Earth materials
13. Earth quake process

14. Geological features of Karnataka
15. Natural resources
16. Soil formation and profile

SECTION - C

Answer any FIVE questions.

(5 × 7 = 35)

17. How soils are formed? How do you conserve soil?
18. Write a brief note on land use planning?
19. List out the role of soil organisms in soil formation.
20. What are the principles of geo-physical methods?
21. List out the impact of Tsunami on environment.
22. Mention the geochemical features of rock.

SECTION - D

Answer any TWO questions.

(2 × 10 = 20)

23. Discuss briefly about various soil and ground water remediation techniques.
24. Give an account of earth process and describe the exogenic earth process
25. Discuss about the formation and classification of rocks.

PGIS 1099 B-14
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 the questions

(10x1=10)

1. Conjugation
2. PAN
3. Carcinogens
4. Dose-response
5. Antidote
6. Metalloids
7. Biotransformation
8. MIC
9. Corrosion
10. SPM

Section-B

Answer any five of the following

(5x3=15)

11. What are organophosphorous pesticides
12. Write a note on redox reactions
13. What is chemical speciation
14. What is photo chemical smog
15. Write a note on sources of heavy metals in water bodies
16. Give an account of point and non point sources of water pollutants

Section-C

Answer any five of the following

(5x7=35)

17. Give an account of photochemical reactions in the atmosphere
18. Write a note on classification of elements
19. Explain electrochemical theory of corrosion
20. Describe biotransformation of organochlorine pesticides
21. Give an account of chemistry of water
22. Write a note on PAN

Section-D

Answer any two of the following

(2x10=20)

23. Describe the chemistry of oil based and water based paints
 24. Explain ozone depletion and the chemical reactions involved in the depletion of ozone
 25. Discuss thermochemical and photochemical reactions in the atmosphere
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