

(Please write your Exam Roll No.)

Exam Roll No. \_\_\_\_\_

## END TERM EXAMINATION

Paper Code: BS-109

Subject: Environmental Studies

Time: 3 Hours

Maximum Marks: 75

**Note: Attempt five questions including Q1 which is compulsory. Select one question from each unit.**

**Q1**

- a) "Phosphorous is a part of the sedimentary biogeochemical cycle while oxygen is not." Justify the statement. (1)
- b) Define mineral and mining. (3)
- c) A sudden, uncontrollable descent of a mass of Earth down a mountain slope is known as \_\_\_\_\_? (1)
- d) Coastal bays, river mouths, and tidal marshes constitute \_\_\_\_\_ ecosystem. (1)
- e) The main cause of genetic diversity is \_\_\_\_\_. (1)
- f) Which gases are responsible for global warming? (1)
- g) Explain the concept of sustainable development. (1)
- h) "Public awareness leads to environmental protection." Justify this statement. (2)
- i) List four effects of acid rain on environment. (3)
- j) Define biopiracy. (1)

### UNIT-I

**Q2**

- a) Define deforestation. What are its main causes? Suggest a few steps to prevent it. (1, 2, 2)
- b) What are food chains and food webs? Describe the food web of a grassland ecosystem. Support your answer with a diagram. (4)
- c) Briefly explain the pyramid of numbers of a forest ecosystem. (3)
- d) Explain ecological succession. (3)

**Q3**

- a) What is a biogeochemical cycle? Describe the carbon cycle diagrammatically. (1, 2)
- b) What is the difference between endangered and endemic species? (3)
- c) Discuss any 3 threats to biodiversity. Suggest 3 combative methods to overcome such threats. (3, 3)
- d) What is in-situ and ex-situ conservation? (3)

### UNIT-II

**Q4**

- a) Write a short note on **Any Four** of the following:
  - (i) Radiation pollution
  - (ii) Vermicomposting
  - (iii) Biomedical waste
  - (iv) Incineration

- (v) Soil erosion (2.5 X 4 = 10)
- b) What are primary air pollutants? Give any 3 examples. (1, 2)
- c) Explain any 2 methods to control particulate matter in air. (2)

**Q5**

- a) Describe the process of wastewater treatment in detail. Draw a flow diagram to support your answer. (6, 1)
- b) How is noise classified on the basis of source? (3)
- c) Suggest any five measures to control noise pollution. (5)

**UNIT-III**

**Q6**

- a) What are energy-related urban problems? How can we control them? (3)
- b) "Rainwater harvesting is an efficient tool of water conservation." Justify this statement. (4)
- c) What is waste-land reclamation. Explain with suitable examples. (4)
- d) Explain the effect of consumerism on the environment. (4)

**Q7**

- a) What do you mean by environmental ethics? What role do they play in reducing environmental hazards? (3)
- b) Write a short note on Environmental Protection Act (1986) and Wildlife Protection Act (1971) (2, 2)
- c) Explain the 5 stages of the environmental impact assessment process. (5)
- d) "Nuclear energy is boon as well as bane for human civilization." Explain. (3)

**UNIT-IV**

**Q8**

- a) What are the major contributory factors to world population growth? (3)
- b) What is the difference between HIV and AIDS? How can we prevent HIV infection? (3)
- c) Discuss the role of IT in environment and human health. Give some practical examples. (4)
- d) Describe family welfare programme in detail. (5)

**Q9**

- a) Write short note on following:
  - (i) Value education and the environment
  - (ii) Oral Rehydration (3 X 2 = 6)
- b) "Women and child welfare are very important for a sustainable environment." Discuss. (4)
- c) What are the objectives of Universal Declaration of Human Rights by United Nations? (2)
- d) Define population ageing, birth rate and growth rate. (3)