

**003406**

May 2023

**B.Tech. (CE/CE(DS)/CSE(AIML))/CE****(Hindi Medium) 4th Semester****ENVIRONMENTAL SCIENCES (MC-03/MCH-03)**

Time : 3 Hours]

[Max. Marks : 75

*Instructions :*

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

**PART-A****1. Write a short note on the following :**

- (a) Green marketing. (1½)
- (b) Eutrophication. (1½)
- (c) Ocean Thermal Energy Conservation (OTEC). (1½)
- (d) Ecological succession. (1½)
- (e) Biogeographic Zones of India. (1½)
- (f) Hotspot of biodiversity. (1½)
- (g) Endemic species. (1½)

- (h) Sanitary landfills. (1½)
- (i) Sustainable Development. (1½)
- (j) Watershed Management. (1½)

**PART-B**

- 2. (a) How would environmental awareness help to protect our environment, explain briefly? (5)
- (b) Write an explanatory note on the multidisciplinary nature of environmental science. Briefly describe, how computer engineering plays an important role in conservation and protection of environmental quality? (10)
- 3. (a) Give a detailed account of various impacts of traditional and modern agricultural practices on environment. (7½)
- (b) What are the environmental impacts associated with mineral extraction? Briefly explain the remedial measures to reduce the impacts of mining. (7½)
- 4. (a) Define ecosystem. Give a detailed account of structural and functional attributes of an ecosystem. (10)
- (b) Why the concept of food web is more realistic than the concept of food chain? (5)
- 5. (a) What do you understand by the term biodiversity? Discuss the concept of biodiversity at different hierarchical levels. (7½)

- (b) Elucidate different approaches of biodiversity conservation along with their merits and demerits. (7½)

- 6. (a) What is water pollution? Briefly explain the effects and various control measures of water pollution. (7½)
- (b) What are wastelands. Give a detailed account of various methods or techniques for reclamation of wastelands. (7½)
- 7. Write short note on any *three* of the following :
  - (a) Environmental ethics.
  - (b) Life expectancy.
  - (c) Role of IT in environmental and health.
  - (d) Universal Declaration of Human Rights. (5×3=15)