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Total No. of Questions: 09

Total No. of Pages: 02

B. Tech. (Sem.1, 2)
ENVIRONMENTAL SCIENCE
Subject Code: EVSC-101
Paper ID: A1109

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

1. Section A is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. Section B contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. Section C contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION A

1. Write short notes on:
 - (a) Distinguish primary pollutants from secondary pollutants with examples.
 - (b) What is greenhouse effect? Discuss the possible impacts of global warming.
 - (c) What is the significant difference between COD and BOD?
 - (d) Differentiate between photoautotrophs and chemoautotrophs.
 - (e) What are the limitations of any two of the non-conventional energy resources?
 - (f) What are the impacts of the depletion of Ozone Layer?
 - (g) Discuss the causes and consequences of ground level ozone.
 - (h) What are environmental ethics?
 - (i) What are induced species?
 - (j) List components of ecosystem.

SECTION B

2.
 - (a) Write short notes on:
 - i. Biochemical oxygen demand (BOD).
 - ii. Eutrophication - Causes and Consequences.
 - (b) Explain the structural and functional components of ecosystem.
3.
 - (a) Explain the concept of ecological pyramid. Discuss under what circumstances they are inverted.
 - (b) Critically evaluate the differences between suspended and attached growth processes

used for treatment of wastewater.

4. Give the classification of solid waste. Along with suitable diagram, describe sanitary landfills and incineration for the disposal of solid waste highlighting their advantages and disadvantages?
5. (a) Define food chain and food web. Explain why the concept of food web is more real ecologically than the concept of food chain?
(b) Mention any four environmental legislations.
6. (a) Give a detailed description and diagrammatic representation of Nitrogen cycle?
(b) What are the disadvantages of population explosion in terms of food security?

SECTION C

7. (a) Acid rain is one of the most serious environmental problems emerged due to air pollution. Explain the mechanism of acid rain formation and the effects associated with that.
(b) Elucidate the role of administration in management of disaster especially floods?
8. Describe briefly the trends in interactions of human settlements with environment with reference to biological and cultural needs.
9. (a) Discuss the impact of thermal pollution on aquatic species. With this view, recommend measures to minimize the impact of thermal pollution on aquatic species.
(b) Differentiate between reservoir and exchange pool in biogeochemical cycles?