

U.G. 4th Semester Examination - 2022

ENVIRONMENTAL SCIENCE

[HONOURS]

Course Code : ENVS-H-CC-L-10

(Environmental Pollution and Human Health)

Full Marks : 40

Time : 2½ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **five** of the following: 2×5=10

- a) What is ocean acidification?
- b) Distinguish between sewage and sludge.
- c) Mention the impacts of sound at 120-150 dB.
- d) What are the advantages of membrane bioreactor?
- e) Plastic is a potent soil contaminant—Justify.
- f) What is methemoglobinemia?
- g) Define photochemical smog.
- h) What is fluorosis?

2. Answer any **two** of the following: 5×2=10

- a) State the role of chelating agents in detoxification.

- b) Briefly describe the working principle of an effluent treatment plant with a schematic diagram.
- c) State the impact of marine pollution on coral reefs in ocean.
- d) Discuss the functional mechanism of trickling filter in wastewater treatment.

3. Answer any **two** of the following: 10×2=20

- a) Distinguish between pollutant and contaminant. What are criteria pollutants? What is air quality index? Mention the adverse effects of VOCs on human health. 2+2+2+4
- b) What is meant by soil quality degradation? Mention different measures to control soil pollution. 2+8
- c) What is eutrophication? State its adverse effects on aquatic ecosystem. Cite three measures to control eutrophication. 2+4+4
- d) Write short notes on the following:

5+5=10

- i) Fluidizedbed reactor
- ii) Clean technologies for radioactive pollution control

[Turn Over]