

May 2024

M.A. (JMC) (Second Semester)  
ENVIRONMENTAL POLLUTION AND  
HUMAN HEALTH (AES-202B)

Time : 3 Hours]

[Maximum Marks : 75

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

**Part A**

1. Briefly answer the following questions :

- (a) Define non-persistent pollutants. 1.5
- (b) How are organometallic compounds hazardous to the environment ? 1.5
- (c) Enlist the various sources of radioactive pollution. 1.5
- (d) What kinds of non-auditory impacts are generated from noise pollution ? 1.5
- (e) How does solubility product influence the transfer of pollutants ? 1.5

- (f) What are the possible sources responsible for reef degradation ? 1.5
- (g) What is thermal pollution ? 1.5
- (h) Define Eutrophication. 1.5
- (i) What are Oxidation Ponds ? 1.5
- (j) How does the implementation of CNG contribute to the reduction of pollutants ? 1.5

### Part B

- 2. (a) Differentiate between Biotransformation and Bioaccumulation. Briefly explain their roles in imposing adverse impacts of pollutants on human health. 7.5
- (b) What is Soil Pollution ? Discuss the various adverse impacts of soil pollution on both biotic and abiotic components and explore methods to control these impacts. 7.5
- 3. (a) What are Pollutants ? Give a detailed account of various classifications of pollutants based on different criteria. 7.5
- (b) Give a brief account of sources and effects of indoor air pollutants on human health. 7.5

- 4. (a) Define Noise Pollution. Briefly explain, how it can be controlled ? 7.5
- (b) Classify air pollutants based on different backgrounds. Briefly explain the kinds of health impacts imposed by air pollutants. 7.5
- 5. (a) Explain, how oil spillage happens in oceans and what are their impact on marine environment. 5
- (b) Give a brief account of different impacts of water contaminants on human health. 5
- (c) What is marine pollution and how can it be controlled ? 5
- 6. (a) How does the Upflow Anaerobic Sludge Blanket (UASB) Reactor contribute to the treatment of effluent ? 5
- (b) Give a detailed account of the objectives, strategies, and outcomes of the Yamuna Action Plan (YAP). 10
- 7. Write short note on any *three* of the following : 5×3=15
  - (a) Radioactivity decay
  - (b) Air quality index
  - (c) Coastal zone management
  - (d) Bio-scrubbers.