#### A-0870

Total Pages: 3 Roll No. .....

### **ENSE-659**

# HAZARDOUS WASTES AND THEIR MANAGEMENT

## M.A. Environmental Studies (MAES)

Examination, June 2025

Time: 2:00 Hrs. Max. Marks: 70

Note: This paper is of Seventy (70) marks divided into two (02) Sections 'A' and 'B'. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

#### Section-A

**Long Answer Type Questions**  $2 \times 19 = 38$ 

Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

Learners are required to answer any two (02) questions only.

- 1. What is hazardous waste. Briefly explain the characteristics, types and composition of hazardous wastes.
- 2. What are the key provisions and responsibilities outlined under the Hazardous Waste (Management and Handling) Rules, 1989?
- 3. Explain the adverse health and environmental impacts due to improper handling of solid waste.
- 4. What are the different treatment methods used for the disposal of hazardous waste?
- 5. What are the key components of hazardous waste management, and how do they contribute to minimize environmental and health risks?

#### Section-B

### **Short Answer Type Questions** $4 \times 8 = 32$

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- 1. What are the key design features and environmental considerations involved in the safe disposal of hazardous waste in landfills?
- 2. What are the different sources of hazardous wastes?
- 3. Explain the composition of municipal solid wastes.

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- 4. Write a short note on different hazardous waste disposal methods.
- 5. Briefly explain the characteristics of solid waste.
- 6. Discuss the various sampling methods used for hazardous waste.
- 7. Write a short note on
  - (a) Incineration
  - (b) Basel convention
- 8. How do the processes of reuse, recycling, and resource recovery contribute to the effective management of hazardous waste.

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