

**Bachelor of Science (B.Sc.) Semester-IV (C.B.S.) Examination**  
**ENVIRONMENTAL SCIENCE Soil Pollution & Waste Management**  
**Paper—I**

Time : Three Hours]

[Maximum Marks : 50]

**N.B. :—** (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable examples and diagrams.

1. What are the main objectives of soil sampling ? Discuss the collection of samples and its preservation. 10

**OR**

(a) How pesticides endanger our life ? Comment. 5  
(b) What do you understand by biological magnification. 5

2. Discuss the physico-chemical properties of solid waste. 10

**OR**

(a) Write informative note on reuse and recycle of solid waste. 5  
(b) Explain disposal of solid waste by pyrolysis. 5  
3. Classify the composting techniques based on oxygen use. What are the merits of vermi composting over conventional composting ? 10

**OR**

(a) Write informative note on Municipal Solid Waste handling rules. 5  
(b) What are the important control parameters for an optimum composting operation. 5  
4. What are the hazardous wastes and how are they classified ? 10

**OR**

(a) Express your views on hospital waste management. 5  
(b) Discuss the environmental problems associated with nuclear waste. 5

5. Attempt any **ten** :

- (a) What is persistent pesticides ?
- (b) What do you understand by Bio-remediation ?
- (c) What is the chemical name for DDT.
- (d) Write a brief report on composition of solid waste.
- (e) Name the factors affecting solid waste generation rate.
- (f) What are the factors that need to be considered while considering incineration.
- (g) What is the significance of solid waste sampling ?
- (h) How biogas is generated from MSW.
- (i) What are the different steps of composting ?
- (j) Name the factors that should be considered for hazardous waste management plant.
- (k) Which type of containers are commonly used in Biomedical waste.
- (l) Differentiate between hazardous and non-hazardous waste.

$1 \times 10 = 10$