

M.Sc. (Part - II) (Environmental Science) (CBCS Pattern) Semester - III
**PSCENVT11-2-B (Core Elective) Paper-XI : Solid and Hazardous Waste
Management**

P. Pages : 1

Time : Three Hours



GUG/S/23/11264

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.
2. Illustrate the answers with suitable diagrams and examples.

1. Discuss types of solid waste collection system. Write a note on Location of transfer station. **16**

OR

- a) Explain characteristics of solid waste. **8**
b) Describe the composition of solid waste. **8**

2. Explain design criteria for sanitary landfill. How GIS based site selectin for land filling is carried out? **16**

OR

- a) Explain land farming and deep well injection. **8**
b) Explain in detail process of gasification and pyrolysis. **8**

3. Describe transportation and storage of hazardous waste. **16**

OR

- a) Give basic division of toxicity. **8**
b) Explain in detail bioaccumulation and biomagnification. **8**

4. Discuss in brief hazardous waste treatment methods. w.r.t. solid, liquid and gaseous waste treatment. **16**

OR

- a) Explain in detail design and construction for secured landfill. **8**
b) Describe the waste reduction techniques of hazardous waste. **8**

5. a) Describe classification of solid waste. **4**

b) Write a note on integrated waste management. **4**

c) Describe mutagenicity and carcinogenicity. **4**

d) Explain elements of waste minimization program. **4**
