

**CERTIFICATE IN SOLID WASTE TREATMENT
TECHNIQUE (CSWATT)**

Term-End Examination

December, 2022

**BWA-001 : SOLID WASTES AND REGULATORY
FRAMEWORK**

Time : 3 hours

Maximum Marks : 70

***Note :** Answer any **seven** questions in all. Use of calculator is **not** permitted.*

1. What are hazardous wastes ? Describe in detail the particular characteristics which classify the waste as hazardous. 10
2. Discuss in detail the air and magnetic component separation technique for recovery of resources from solid waste using neat sketches. 10
3. Enlist the 'features' and 'applicability' of Integrated Solid Waste Management (ISWM) approach. 10

4. Elaborate the term ‘Agricultural Waste’ under the category of solid waste. 10
5. Describe the ‘Load Count Analysis’ and ‘Weight Volume Analysis’ for estimation of solid wastes. 10
6. What is the need for sampling of solid waste ? Also discuss the various aspects of sampling of solid waste. 10
7. (a) Enumerate the factors which affect the coefficient of permeability of the waste. 6
- (b) Give the test methods generally used for landfilled Municipal Solid Waste (MSW). 4
8. Explain the phrase “Energy content of solid waste components”. Write and name the formula used to calculate energy content. Also enlist the methods for determining energy content. 10
9. Write short notes on the following : $4 \times 2 \frac{1}{2} = 10$
- (a) Environment Protection Act, 1986
- (b) E-Waste Management Rules
- (c) Leachate
- (d) Stratified Random Sampling