

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

Term-End Examination

December, 2024

BWA-004 : DISPOSAL OF WASTES

Time : 3 Hours

Maximum Marks : 70

Note : (i) Attempt any *five* questions.

(ii) All questions carry equal marks.

1. (a) Discuss the functions and characteristics of various layers in a landfill. 7
- (b) Discuss the various components of landfilling cost. 7
2. (a) Discuss the important factors that must be considered in the design of landfills. 7
- (b) Describe the conditions which affect the landfill gas production. 7

3. (a) Describe the methods of near surface gas monitoring. 7
(b) Explain the mechanism of leachate generation. 7
4. (a) Discuss the methods of treatment of landfill gas. 7
(b) Describe the various properities of leachate. 7
5. (a) Describe the safe closure plan for a disposal site. 7
(b) Explain the operations performed after the closure of a landfill site. 7
6. (a) Discuss the advantages and disadvantages of methods of identification of environmental impacts. 7
(b) Describe the important stages of EIA. 7
7. (a) Discuss the various types of EIA in brief. 7
(b) What is 'integrated solid waste management system hierarchy' ? Explain its various components. 7

8. Write short notes on any *four* of the following :

$$4 \times 3\frac{1}{2} = 14$$

- (a) Objectives of EIA
- (b) Landfill capping
- (c) Gas well
- (d) Effects of landfilling on human health
- (e) Need of ICT in solid waste management
- (f) Applications of digital technologies in waste management

× × × × × × ×