

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

Term-End Examination

December, 2024

**BWA-003 : SOLID WASTES PROCESSING AND
TREATMENT TECHNIQUES**

Time : 3 Hours

Maximum Marks : 70

Note : (i) Answer any **seven** questions.

(ii) Each question carries equal marks.

(iii) Use of calculator is permitted.

1. What is meant by source reduction of solid wastes ? Describe its various purposes. Also, briefly discuss various actions that can be taken at the local level to encourage source reduction. 10

2. Describe various factors affecting the selection of air separation equipment. Also discuss about open inlet type of air classifier. 10
3. Describe in detail the significance of 'Recycling' of wastes. 10
4. Describe in detail various factors affecting the composting process. 10
5. What are different methods categorized as in-vessel composting methods ? Describe any *one* in detail. 10
6. What is meant by anaerobic digestion of solid wastes ? Describe in detail the single stage process. 10
7. What are the different types of biogas plants ? Describe any *one* in detail. 10
8. What is meant by Mechanical Biological Treatment (MBT) ? Describe various benefits of MBT over other conventional methods of waste disposal. 10

9. What is meant by Incineration ? How do incinerators affect the environment ? Describe any *one* method used to control the environmental effect of incinerator. 10
10. What are the different types of mine wastes ? Briefly discuss about various methods of mine waste management. 10

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