

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

Term-End Examination

June, 2025

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

Time : 3 Hours

Maximum Marks : 70

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

(ii) All questions carry equal marks.

1. (a) Explain the purpose of processing in waste management. 5
- (b) Describe magnetic separation method with the help of a neat sketch. 5

2. Explain the major elements of recycling program. 10
3. (a) Explain the difference between compaction and size reduction. 5
(b) Discuss the various factors affecting the composting process. 5
4. Explain the working of a family stage biogas plants with the help of a neat sketch. Also discuss its advantage and limitations. 10
5. (a) Explain the difference between Mechanical Biological Treatment (MBT), composting and anaerobic digestion. 6
(b) How is the biological treatment of MBT carried out ? 4
6. Describe the incineration process for power generation with the help of a neat sketch. 10
7. (a) Explain the thermal treatment techniques in waste management. 5
(b) What is gasifier ? Explain various types of gasifiers. 5

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8. Discuss in detail various issues in thermal treatment process. 10
9. Write short notes on any *two* of the following : 5+5
- (a) Flocculation
 - (b) Chemical treatment
 - (c) Hazardous waste and their management
 - (d) e-Wastes

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