## CERTIFICATE IN SOLID WASTES TREATMENT TECHNIQUES (CSWATT)

## Term-End Examination December, 2022

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

Time: 3 hours Maximum Marks: 70

**Note:** Attempt any **five** questions. All questions carry equal marks.

- 1. (a) What is the purpose of processing of wastes? 7+7=14
  - (b) Describe the process of resource recovery through material recycling in Indian context.
- **2.** (a) What are the various factors that decide the selection of size reduction equipment? 7+7=14
  - (b) Discuss the drawbacks of composting.
- Explain the effects of various process parameters in Anaerobic digestion.

- **4.** (a) Describe in brief the various operations of Mechanical Biological Treatment (MBT). 7+7=14
  - (b) Describe the gasification process in detail.
- **5.** (a) Explain steam sterilization process in brief. 7+7=14
  - (b) Discuss the relative advantages and disadvantages of mining wastes.
- **6.** (a) Discuss the generation and management of waste from oil-fired power plants. 7+7=14
  - (b) Explain the process of chemical treatment of wastes in brief.
- 7. Write short notes on any **four** of the following:  $4 \times 3 \frac{1}{2} = 14$ 
  - (a) Incineration of Wastes
  - (b) Radioactive Waste Management
  - (c) Bio-Oil
  - (d) Waste to Energy
  - (e) Entrained Flow
  - (f) Acetogenesis