Seat No.

Total No. of Pages : 2

MAR_APR 2026 SUMMER EXAMINATION

1154 B.Tech. CBCS

Sub. Name: Solid Waste Management

Sub. Code: 67569/83739/84019

Day and Date: Tuesday ,19-05-2026 **Total Marks: 70**

Time: 10:30 AM To 01:00 PM

Instructions:
1. **All questions are compulsory**
2. **Assume suitable data wherever necessary and mention it boldly**
3. **Draw neat labelled diagrams wherever necessary**
4. **Figures to the right indicate full marks**

Special Inst.: **Q. No. 4 and Q. No. 8 are compulsory and attempt any two questions from Q. No. 1, 2, 3 and any two questions from Q. No. 5, 6, 7.**

Q1) Answer the following questions **[10]**

a. Describe the hierarchy of solid waste management and its importance. **[5]**

b. Classify solid waste based on sources and types. **[5]**

Q2) Answer the following questions **[10]**

a. Name and explain the different methods of house to house collection system **[5]**

b. What is Recovery & Recycling of Solid waste? What are the major recoverable materials present in the MSW. **[5]**

Q3) Answer the following questions **[10]**

a. Describe the criteria for the location of a transfer station **[5]**

b. Describe the processing techniques used in a typical Material Recovery Facility(MRF). **[5]**

Q4) Answer the following questions **[15]**

a. Write the present scenario of Municipal Solid Waste Management in India. **[5]**

b. Define following Unit Operation w.r.t. SCS :- **[5]**
a) Pick up b) At-site

c. Explain the different types of air classifiers **[5]**

Q5) Answer the following questions **[10]**

a. What are the criteria for selecting a landfill site? **[5]**

33595

b. Describe with simple sketch the essential components of a sanitary landfill. **[5]**

Q6) Answer the following questions **[10]**

a. Compare aerobic and anaerobic composting. **[5]**

b. Explain the role of carbon to nitrogen (C:N) ratio in composting. How can it be managed practically?.[**[5]**

Q7) Answer the following questions **[10]**

a. What are the objectives and need for incineration in solid waste management? **[5]**

b. Write the air pollution problem associated with Incineration and its control techniques. **[5]**

Q8) Answer the following questions **[15]**

a. Discuss the leachate collection and removal system in a sanitary landfill. **[5]**

b. Explain the recovery of Biogas energy from MSW **[5]**

c. How does pyrolysis differ from incineration? **[5]**

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.
सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (1154) B.Tech. CBCS (83739) Solid Waste Management Part 4 SEM 7
2] (101) Bachelor of Engineering (84019) Solid Waste Management Part 4 SEM 7
3] (101) Bachelor of Engineering (67569) Solid Waste Management Part 4 SEM 7

33595