SP-181

Seat No.	

Total No. of Pages : 2

B.Tech. (Civil Engineering) (Part-IV)
(Semester - VII) (CBCS) Examination, December - 2023
SOLID WASTE MANAGEMENT
Professional Elective - I
Sub. Code : 83739

Day and Date : Saturday, 09 - 12 - 2023 **Total Marks : 70**

Time : 10.30 a.m. to 1.00 p.m.

Instructions :
1) **Q. No. 4 and Q. No. 8 are compulsory of respective sections.**
2) **Attempt any two questions from Q. No. 1, 2, 3 and any two questions from Q. No.5,6,7**
3) **Figures to the right indicate full marks.**
4) **Make assumptions wherever necessary and state them clearly.**

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SECTION - I

Q1) Answer the following questions.

a) Write the need of MSW management. **[5]**

b) What are the different types and sources of Solid Waste? **[5]**

Q2) Answer the following questions.

a) Write and explain any five factors that affect the generation rates of the Solid waste. **[5]**

b) Write the different Municipal Solid Waste collection methods. **[5]**

Q3) Answer the following questions.

a) Explain the various types of Transfer Station. **[5]**

b) With help of the flow diagram,explain MRF. **[5]**

Q4) Answer the following questions.

a) Write a note on Bio-medical Waste Management. **[5]**

b) Write short notes on haul container systems. **[5]**

c) Write the objectives of solid waste processing systems. **[5]**

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SECTION - II

Q5) Answer the following questions

a) Draw the c/s of sanitary landfill and explain the essential components. **[5]**

b) What is a leachate? Give the Typical Characteristics of Leachate. **[5]**

Q6) Answer the following

a) What are the important factors affecting composting? How they are controlled during composting? **[5]**

b) Write a note on Bangalore & Indore Process of Composting for small towns. **[5]**

Q7) Answer the following

a) Explain various elements of incineration system. **[5]**

b) Explain pyrolysis and its bi-products. **[5]**

Q8) Answer the following

a) Discuss in detail the criteria for Site Selection for MSW Landfill. **[5]**

b) Explain Theory of Composting. **[5]**

c) Write advantage and disadvantage of Incineration treatment used to SW. **[5]**

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