

Sample Question Paper
'I' – Scheme

Programme Name : Civil Engineering
Programme Code : CE/CR/CS
Semester : Sixth
Course Title : Solid Waste Management
Marks : 70

22605

Duration: 3 Hours

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FIVE of the following.

10 Marks

- a. Define solid waste.
- b. List the tools and equipment used in collection of solid waste.
- c. State the purpose of Transfer Station.
- d. List the factors affecting composting process of solid waste.
- e. State the significance of legal aspects in solid waste management.
- f. Define: Domestic waste and Hazardous solid waste.
- g. List the sources of generation of biomedical waste.

Q.2 Attempt any THREE of the following.

12 Marks

- a. Explain any four factors affecting the generation of solid waste.
- b. Explain the methods of collection of solid waste in your town/city.
- c. Draw a neat labeled sketch of single liner system of leachate control.
- d. Suggest and justify the criteria adopted for the execution of vermicomposting.

Q.3) Attempt any THREE of the following.

12 Marks

- a. Explain with sketch the Bangalore Method of composting.
- b. State the terms related to Solid waste management- i) Segregation ii) Recovery iii) Recycling iv) Reuse.
- c. Explain the ill effects on the health of persons involved in solid waste collection.
- d. Suggest the relevant situations for the disposal of solid waste through incineration.

Q.4) Attempt any THREE of the following.

12 Marks

- a. Define E-waste and its harmful effects on environment.
- b. Explain the control measures for minimizing the industrial solid waste.
- c. Explain the major provisions in Municipal Solid Waste Management Rules 2016.
- d. Explain the importance of public participation in solid waste management.
- e. Explain the role of Maharashtra Pollution Control Board in Plastic waste management.

Q.5) Attempt any TWO of the following.

12 Marks

- a. Draw organization pattern of solid waste management for a city having population up to one million.
- b. Suggest various management technologies for biomedical waste.
- c. Discuss the utility and importance of rag pickers in solid waste management.

Q.6) Attempt any TWO of the following.

12 Marks

- a. Explain area method of landfilling and state the factors to be considered for site selection.
- b. Suggest the appropriate method for disposal of industrial solid waste and need of its recycling.
- c. Discuss the present scenario of recycling of E- waste in India.

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Sample Test Paper I
'I' – Scheme

Programme Name : Civil Engineering

Programme Code : CE/CR/CS

Course Name : Solid Waste Management (SWM)

Semester : Sixth

Marks : 20

22605

Duration: 1 hour

Sample Question Paper Profile for CO Attainment is shown below:

Note: Que.1-Answer any 4 out of 6 questions

Que. 2-Answer any 3 out of 5 questions

Class Test I

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q.1 Attempt any FOUR of the following.

(8 Marks)

- a) Define - Solid Waste and list different types of Solid Waste generated from community.
- b) List the tools and equipment used in collection of solid waste.
- c) List the factors affecting the solid waste generation.
- d) State the necessity of transfer station.
- e) State any two advantages and disadvantages of Landfill method of solid waste disposal.
- f) List the products of incineration process and state its utility value.

Q.2 Attempt any THREE of the following.

(12 Marks)

- a) Explain solid waste management hierarchy with neat sketch.
 - b) State the methods of solid waste collection and explain about any one.
 - c) Draw a neat labeled sketch of composite liner system of leachate control.
 - d) Draw organization pattern of solid waste management for a city having population up to two lakh.
 - e) Define recycling of solid waste. State the purposes of recycling of municipal solid waste.
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Sample Test Paper II
'T' – Scheme

Programme Name : Civil Engineering

Programme Code : CE/CR/CS

Course Name : Solid Waste Management (SWM)

Semester : Sixth

Marks : 20

22605

Duration: 1 hour

Sample Question Paper Profile for CO Attainment is shown below:

Note: Que.1- Answer any 4 out of 6 questions

Que. 2- Answer any 3 out of 5 questions

Class Test II

Instructions:

1. All questions are compulsory
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks
4. Assume suitable data if necessary
5. Preferably, write the answers in sequential order

Q.1 Attempt any FOUR of the following.

(8 Marks)

- a) Define biomedical waste and list its sources.
- b) State the importance of segregation in solid waste management.
- c) Define E-waste and list its sources.
- d) State control measures for industrial waste.
- e) State the importance of legal aspects in solid waste management.
- f) List the areas which are essential for public participation in solid waste management.

Q.2 Attempt any THREE of the following.

(12 Marks)

- a) Describe the biomedical waste management technologies.
 - b) Describe the health problems during handling and processing of solid waste.
 - c) Explain the disposal methods for industrial solid waste.
 - d) Explain the role of state pollution control board in waste management.
 - e) Describe the methods of disposal of E-waste.
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