



17605

16172

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions :**
- (1) All questions are **compulsory**.
 - (2) Answer **each** next main question on a **new** page.
 - (3) Illustrate your answers with neat sketches **wherever** necessary.
 - (4) Figures to the **right** indicate **full** marks.
 - (5) Assume suitable data, if **necessary**.

Marks

1. Attempt **any five** of the following :

20

- a) Define 'Solid Waste', also list different types of solid waste.
- b) Explain the impact of Solid Waste on environment.
- c) Draw the organisation pattern of Solid Waste Management.
- d) State the four disadvantages of landfill method.
- e) List various types of special waste.
- f) Explain the health safety measures to be adopted during handling and processing Solid Waste.
- g) State the four benefits of recycling of Solid Waste.

2. Attempt **any four** of the following :

16

- a) Explain the various sources of Solid Waste.
- b) State four factors affecting the Solid Waste Generation.
- c) List the various eight types of collection and transportation equipments of Solid Waste.
- d) State various methods of storage of Municipal Solid Waste.
- e) Explain any two methods of collection of municipal waste.
- f) Explain principle of composting process and favourable conditions for it.

3. Attempt **any four** of the following :

16

- a) Differentiate between Bangalore and Indore methods of composting.
- b) Explain advantages of vermicomposting method also mention its suitability.

P.T.O.



- c) State the four factors affecting the site selection for landfilling technique to dispose Solid Waste.
- d) Explain the mechanical composting method.
- e) Explain the working of biogas plant with the help of neat sketch.
- f) Define :
 - i) Biomedical Waste.
 - ii) E-Waste.

4. Attempt any four of the following :

16

- a) State the varieties of E-Waste and why it is dangerous ?
- b) Explain the methods of disposal and recycling of E-waste.
- c) State types and characteristics of Solid Waste from engineering and chemical type of industries.
- d) Explain the various control measures of industrial waste.
- e) Explain four salient features mentioned in biomedical waste management and handling as per rule 1998.
- f) What are the different types of health problems during time of segregation, reuse, recovery and recycling of solid waste possible to human being ?

5. Attempt any two of the following :

16

- a) Explain the Hierarchy of Solid Waste Management.
- b) What is meaning of transfer station ? And explain its necessity and suitable location.
- c) Describe the process of incineration and products of it with their uses.

6. Attempt any two of the following :

16

- a) Describe method of collection and disposal of biomedical waste.
 - b) Explain the importance of Public involvement and participation in Solid Waste Management.
 - c) State the benefits of recycling and marketing strategies for recyclables.
-