Code: CE7T5D

IV B.Tech - I Semester - Regular Examinations - October - 2017

SOLID WASTE MANAGEMENT (CIVIL ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART - A

Answer all the questions. All questions carry equal marks

 $11 \times 2 = 22$

1.

- a) Differentiate between solid waste and hazardous waste.
- b) List out different types of municipal solid waste.
- c) Write the importance of solid waste separation.
- d) Outline the classification of collection routes of solid waste.
- e) Explain the necessity of transfer station.
- f) Classify various processing techniques.
- g) Prioritize the factors to be considered in selection of disposal site.
- h) Explain how an Incinerator helps to reduce pollution?
- i) Write a short note on 'composting'.
- j) Write a short note on plastic waste management.
- k) Write the composition of E-Waste.

PART - B

Answer any *THREE* questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$

- 2. a) Explain the effects of improper disposal of solid waste on human health & environment. 8 M
 - b) Discuss the scope and objectives of onsite storage and handling. 8 M
- 3. a) Explain the methods of collection system with a flow diagram. 8 M
 - b) Classify the types of transfer station and illustrate the factors to be addressed when considering a potential site for transfer station.

 8 M
- 4. a) Outline the objectives of waste processing. 8 M
 - b) Describe various options for the disposal of solid wastes and the relative merits of disposal options. 8 M
- 5. a) Explain the process of Pyrolysis for solid waste disposal.

 8 M
 - b) Describe the classification of composting technologies and discuss the steps involved in the composting process. 8 M

- 6. a) Explain in detail about recycling and disposal of plastic waste. 8 M
 - b) Elaborate various methods to be adopted in dealing with E-Waste. 8 M