

B.E./B.TECH. Degree Examination, January 2021

Semester – VII

CE16006-Municipal Solid Waste Management

(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions**PART A - (8 X 2 = 16 marks)**

1. The process of burning of municipal solid waste at high temperature is called
a) Incineration b) Composting c) Land filing d) Shredding
2. Which of the following is a biodegradable waste?
a) Polythene bags b) Synthetic fiber c) Food waste d) Paper
3. In which method of disposal of municipal solid waste, the waste is dumped in the soil?
a) Incineration b) Composting c) Land filing d) Shredding
4. Which of the following is correct regarding disposal of waste by land filling?
a) Economical method b) Preferred in low lying areas
c) Foul gases are not produced d) Separation of different types of waste not required
5. Mention any two public awareness programme with regard to SWM.
6. Write any four health effects due to improper disposal.
7. List out the physical and chemical parameters considered for energy recovery from msw.
8. State the solid waste generation rate in rural and urban centers of our country.

PART B - (4 X16 = 64 marks)

09. (a) Write a detailed note on Solid Waste sources in urban Centres. **(16)**
(OR)
(b) Elaborate the goals and objective of solid waste management. **(16)**
10. (a) Explain different options for onsite segregation of Solid Waste keeping public health in mind. **(16)**
(OR)
(b) What is the necessity of onsite segregation of solid waste and Explain any one method. **(16)**
11. (a) Determine the Haul Equation constant from the following data. **(16)**

Round Trip distance km/trip	0.8	2.5	5.0	7.5	10	12.5	15
Average haul speed km/h	10	21	30	34	37.5	38	39.5

(OR)

(b) What are transfer stations? What are the factors to be considered while selecting the site for a transfer station? **(16)**

12. (a) Explain the factors influencing the process of composting. State the various practical problems associated with it. **(16)**

(OR)

(b) What are the Materials that can be recovered from solid waste? Briefly describe concepts of energy recovery from solid waste. **(16)**