Reg. No. :

Question Paper Code : **X60230**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2020.

Seventh/Eighth Semester

Civil Engineering

CE 2039/10111 CEE 36 — MUNICIPAL SOLID WASTE AND MANAGEMENT

(Regulations 2008/2010)

(Common to PTCE 2039 — Municipal Solid Waste and Management for B.E.
(Part-Time) Sixth Semester – Civil Engineering – Regulations 2009)

Answer ALL questions.

Time : Three hours   Maximum : 100 marks

PART-A (10 x 2 = 20 Marks)

1.   Recall the sources of solid wastes.

2.   What is the role of NGO in solid waste management?

3.   What is meant by waste segregation?

4.   Write the impact of waste management on economy.

5.   List the components of waste collection.

6.   Predict the disadvantages of communal containers.

7.   Recall pyrolysis.

8.   What is composting in solid waste management?

9.   Recall the use of incineration in landfill.

10. Write the components of typical landfill gas.

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PART-B (5 x 16 = 80 Marks)

11. a) (i) Recall the source based classification of municipal solid waste. (8)

        (ii) write the methods of sampling and its characterization (8)

<div align="center">OR</div>

   b) Explain all the factors affecting the quantity of municipal solid waste management. (16)

12. a) (i) Recall the types of containers used for onsite storage. (10)

        (ii) Write the factor affects the waste collection. (6)

<div align="center">OR</div>

   b) Explain the critical waste evaluation options in India. (16)

13. a) (i) Recall the types of vehicles used for collection of waste. (8)

        (ii) Reproduce about micro and macro collection routes. (8)

<div align="center">OR</div>

   b) Describe the types of waste transfer stations. (16)

14. a) (i) Write the process of source separation. (8)

        (ii) Recall the special equipment used in recycling. (8)

<div align="center">OR</div>

   b) Explain the resource recovery technique from solid wastes. (16)

15. a) Explain the principle and layout of sanitary landfill. (16)

<div align="center">OR</div>

   b) (i) Describe the treatment process of leachate. (10)

       (ii) Recall the settling process in landfill. (6)

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