

B.E., DEGREE EXAMINATIONS: NOV/DEC 2012

Seventh Semester

CIVIL ENGINEERING

CEE211- Municipal Solid Waste Management

Time: Three Hours

Maximum Marks: 100

Answer All the Questions

PART A (10 x 1 = 10 Marks)

1. Garbage weight varies from

- a) 450 – 900 kg/m³
- b) 1000 - 1500 kg/m³
- c) 100 - 120kg/m³
- d) 700 - 850kg/m³

2. Composting is a good method of MSW treatment when the MSW is _____ in Nature

- a) Inorganic
- b) organic
- c) hazardous
- d) toxic

3. Treatment of leachate

- a) Land fills
- b) Fluidized bed treatment
- c) Sedimentation
- d) Coagulation

4. S1 - Flies is the disadvantage in landfills

S2 - Municipal solid waste is the degradable waste

- a) S1 is wrong and S2 is correct
- b) S1 and S2 are correct
- c) S1 and S2 are correct
- d) S1 is correct and S2 is wrong

5. The pneumatic transport of MSW could be adopted for

- a) Commercial area
- b) industrial area
- c) high density apartments
- d) institutions

6. the most commonly used sealants in Land fill method of MSW disposal is

- a) Asphalt
- b) concrete
- c) synthetic chemical
- d) compacted clay

PART C (5x14=70 Marks)

21. a) What are the physical and chemical composition of MSW

(OR)

b) What are the types of sources and explain

22. a) How will you analyze the collection route in MSW

(OR)

b) What are the various wastes processing system? Give their suitability?

23. a) What are the different types of transfer station? Explain any three

(OR)

b) Write short notes on

(i) Magnetic separation in MSW

(ii) Air classification in municipal solid waste

24. a) Explain the working principles of incineration and pyrolysis

(OR)

b) Explain the working principles of aerobic and anaerobic composting of MSW

25. a) Explain the various factor to be considered for evaluating on site processing
for landfills

(OR)

b) Explain working process of landfills with sketch.
