

Q.21 What are the factors that influence the generation of municipal solid waste? (any five)

Q.22 Enlist the name of various biomedical waste management technologies? Define any one.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain the various sources of solid waste.

Q.24 What is vermi composting? Describe its process in detail.

Q.25 What are the different techniques used for e-waste recycling and disposal? Explain.

No. of Printed Pages : 4
Roll No.

220756B

5th Semester/Civil Subject : Solid Waste Management

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 What does the term “Fixed Carbon” in MSW analysis refer to?

- a) Non-volatile residue after heating
- b) Organic Material
- c) Glass
- d) Inorganic salts

Q.2 What is the ideal moisture content for composting?

- a) 10-20%
- b) 30-40%
- c) 50-60%
- d) 70-80%

Q.3 Which method of e-waste disposal is known to release toxic emission?

- a) Recycling
- b) Incineration
- c) Land filling
- d) Reuse

- Q.4 What is the main purpose of a biogas plant's digester?
- To ferment biomass
 - To store raw materials
 - To cool the slurry
 - To filter water
- Q.5 What is the carbon to nitrogen ratio ideal for composting?
- 10-15
 - 20-25
 - 25-30
 - 35-40
- Q.6 Which of the following represents the volatile matter in MSW?
- Plastic
 - Metals
 - Glass
 - Organic Material

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 _____ color-coded bag is used for disposing of contaminated plastic items such as used syringes.
- Q.8 A _____ is a designated area where waste is isolated from the environment until it is safe for disposal.
- Q.9 The major gas generated in landfills due to anaerobic decomposition is _____.

(2)

220756B

- Q.10 _____ is the primary components of moisture in municipal solid waste.
- Q.11 _____ is the process of recovering valuable materials from discarded electronic devices to reduce environmental impact.
- Q.12 The composting method that uses earthworms is called _____.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Describe the chemical characteristics of municipal solid waste.
- Q.14 What are the various varieties of e-waste disposal?
- Q.15 List the tools and equipment used in municipal solid waste collections.
- Q.16 What are the advantages of vermicomposting. (Any five)
- Q.17 Describe solid waste management hierarchy.
- Q.18 What are the factors affecting composting process.
- Q.19 List the waste transport vehicles along with their capacities.
- Q.20 Discuss the techniques used to manage leachate in landfills.

(3)

220756B