

UNIT – II: Engineering Systems for Solid Waste Management

Multiple Choice Questions (MCQs) with Answers

1. Solid waste generation depends mainly on:

- A) Climate only
- B) Population, lifestyle, and economic activities
- C) Soil type only
- D) Groundwater level

Answer: B) Population, lifestyle, and economic activities

2. On-site handling of solid waste includes:

- A) Collection and transportation
- B) Segregation, storage, and processing at the source
- C) Landfilling
- D) Incineration only

Answer: B) Segregation, storage, and processing at the source

3. The temporary keeping of waste before collection is known as:

- A) Disposal
- B) Recycling
- C) Storage
- D) Composting

Answer: C) Storage

4. In a stationary container system, the container:

- A) Is transported along with waste
- B) Remains at the collection point
- C) Is disposed of after collection
- D) Is buried underground

Answer: B) Remains at the collection point

5. In a hauled container system:

- A) Waste is transferred from container to vehicle
- B) The entire container is hauled to the disposal site
- C) Waste is burned at the source
- D) Waste is treated before collection

Answer: B) The entire container is hauled to the disposal site

6. Route planning in waste collection is carried out to:

- A) Increase collection costs
- B) Increase fuel consumption
- C) Optimize collection efficiency and reduce travel time
- D) Avoid waste segregation

Answer: C) Optimize collection efficiency and reduce travel time

7. A transfer station is used to:

- A) Generate solid waste
- B) Store hazardous waste permanently
- C) Transfer waste from smaller vehicles to larger transport vehicles
- D) Recycle plastic waste

Answer: C) Transfer waste from smaller vehicles to larger transport vehicles

8. Which of the following is a biological processing technique?

- A) Composting
- B) Shredding
- C) Baling
- D) Compaction

Answer: A) Composting

9. Which processing technique reduces the size of solid waste materials?

- A) Composting
- B) Incineration
- C) Shredding
- D) Landfilling

Answer: C) Shredding

10. The primary objective of waste collection systems is:

- A) Increase waste generation
- B) Ensure efficient and hygienic removal of waste
- C) Eliminate recycling
- D) Increase storage time

Answer: B) Ensure efficient and hygienic removal of waste

Fill in the Blanks with Answers

1. The quantity of waste produced by a community is called waste ____.

Answer: generation

2. Segregation and storage of waste at the source are part of ____ handling.

Answer: on-site

3. Waste is temporarily stored in ____ before collection.

Answer: containers

4. In a stationary container system, the container remains ____ during collection.

Answer: stationary

5. In a hauled container system, the entire ____ is transported.

Answer: container

6. Route planning helps reduce fuel consumption and collection ____.

Answer: time

7. A ____ station serves as an intermediate facility between collection and disposal.

Answer: transfer

8. Composting is a ____ process used for organic waste treatment.

Answer: biological

9. Shredding is a processing technique used for ____ reduction.

Answer: size

10. Efficient collection and transportation are important parts of solid waste ____.

Answer: management