

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR
DIRECTORATE OF DISTANCE EDUCATION**

Programme: Diploma in Solid and Hazardous Waste Management

Subject: SolidWaste 1stSemester

Code: SHWM-101

Important Instructions:

Total Marks=30

Attempt all questions from each assignment given below.

- ii. Each assignment carries 15 marks.
- iii. All questions are to be attempted in legible handwriting on plane white A-4 size paper and same is uploaded through login your account.

ASSIGNMENT- I

1. Explain physical and chemical characteristics of solid waste.
2. Explain the objective and various processing techniques used for municipal solid waste (MSW) disposal.
3. Explain the various collection methods and means of transportation used for solid waste.

ASSIGNMENT- II

1. Explain the various sources of solid waste.
2. State the various methods of storage of municipal solid waste (MSW).
3. Discuss classification of waste minimization techniques.

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Programme: Diploma in Solid and Hazardous Waste Management

Subject: Solid Waste Treatment & Disposal 1st Semester

Code: SHWM-102

Important Instructions:

Total Marks=30

Attempt all questions from each assignment given below.

ii. Each assignment carries 15 marks.

1. iii. All questions are to be attempted in legible handwriting on plane white A-4 size paper and same is uploaded through login your account.

ASSIGNMENT- I

1. What do you mean by Biogas? Write short note on various types of Biogas plant. Discuss the operations and processes of Biogas plant.
2. What do you mean by Incineration? Discuss in detail the working of various types of Incinerator.
3. Define Leachate. What are adverse impacts of Leachate on environment? Discuss methods of Leachate treatment.

ASSIGNMENT- II

1. What is the difference between composting and Vermi-composting? Discuss various Technology of composting. Also discuss benefits of compost.
2. How pyrolysis is different from Incineration? Discuss various technology of pyrolysis. Also discuss in details the product of pyrolysis.
3. What do you mean by landfill? Discuss design and siting of landfill. Discuss various methods of land filling.

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Programme: Diploma in Solid and Hazardous Waste Management

Subject: Swachh Bharat Mission 1st Semester

Code: SHWM-103

Important Instructions:

Total Marks=30

Attempt all questions from each assignment given below.

- ii. Each assignment carries 15 marks.
- iii. All questions are to be attempted in legible handwriting on plane white A-4 size paper and same is uploaded through login your account.

ASSIGNMENT-I

1. Explain Swachh Bharat Abhiyan (SBA).
2. What is sustainable waste management? Describe Swachh Bharat Mission guidelines.
3. What are indicators of Swachh Bharat? Enumerate Urban sustainable sanitation.
Explain Garbage Free Star Rating (Cities).

ASSIGNMENT-II

1. What are Swachh tourist destinations? Explain monitoring, supervision and community mobilization.
2. Explain schemes and programs of Swachh Bharat Abhiyan and success stories of Swachh Bharat Abhiyan.
3. Write Two case studies of Swachh Bharat Abhiyan.