

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

Programme: DIPLOMA IN INDUSTRIAL HEALTH AND SAFETY

Subject: Environmental Pollution Management (2nd Semester)

Code: IHS-201

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

- Q1. Explain the effect of PM_{2.5} on the environment. Discuss various measures to control it.
- Q2. Discuss how damping material act as a noise control device?
- Q3. What is wastewater treatment? Explain different processes used in advance (tertiary) treatment.

ASSIGNMENT - II

- Q1. What do you understand by waste valorisation? Explain different types of thermal treatment and their importance for energy recovery?
- Q2. Write a descriptive note on noise control devices.
- Q3. Explain air pollution management for a thermal power plant.

Subject: Environmental Toxicology and Risk Assessment (2nd Semester)

Code: IHS-202

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 the concept of environmental toxicology. Discuss the classification of toxicants with suitable examples.
2. Describe the process of toxicant uptake, biotransformation and elimination in the human body.
3. Discuss the different types of target organ toxicity such as hepatotoxicity, nephrotoxicity and neurotoxicity.

ASSIGNMENT- II

1. Explain the impact of pollutants on ecosystems with reference to pesticides, heavy metals, or carcinogens.
2. Describe the steps involved in environmental risk assessment: hazard identification, dose response assessment, exposure assessment, and risk characterization.
3. Write short note on following:
 - a) Bioindicators
 - b) Carcinogens

Subject: Fire Safety and Explosion Control (2nd Semester)

Code: IHS-203

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. What is chemical reaction. Distinguish between exothermic and endothermic reaction.
2. Explain the history of fire.
3. What are couplings? Discuss about component parts of interlocking couplings.

ASSIGNMENT- II

1. Explain about tank farms.
2. Explain addressable and non-addressable fire detection system.
3. What is active and passive fire protection system of fire. Explain the various classes of fire.

Subject: Chemical safety and Control (2nd Semester)

Code: IHS-204

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

4. What are the sources and characteristics of explosives and flammable liquids?
5. Explain handling, storage labelling and transport of chemicals?
6. What is the different PPE used in chemical safety?

ASSIGNMENT- II

1. Write a note on Explosive rules, 2008?
2. Explain the concept of dose response relationship and threshold limit value?
3. What are the chemical hazards due to flammable gas and toxic release?

Subject: Hazardous Waste Management 2st Semester

Code: IHS-205

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. Define hazardous, biomedical and E-waste and write their classification.
2. Write a descriptive note on hazardous waste minimization techniques.
3. Write safety measures for storage, treatment & disposal of hazardous waste.

ASSIGNMENT- II

1. Write a note on characterisation & identification of E-waste.
2. Write short note on following:
 - a) Incineration
 - b) Pyrolysis and Gasification
3. Explain the Bio-Medical Waste Management Rules, 2016.