## Post Graduate Diploma in Industrial Safety Management (PGDISM)

(Through Distance Education)

**Session: 2014-15** 

# Directorate of Distance Education Guru Jambheshwar University of Science & Technology Hisar

#### Prepared by

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Course: Principles of Industrial Safety Code: PGDISM-01

#### **Important Instructions**

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

- 1. Define industrial safety and its dimensions. Illustrate the nature and types of industrial safety.
- 2. Discuss the responsibilities of management, workers and trade unions in safety management.
- 3. Elaborate the safety movements in Europe and USA. How these have affected the industrial safety movement in India?
- 4. What is ergonomics? Explain the objectives, importance and scope of ergonomics in safety management.

#### **Assignment-II**

Course: Principles of Industrial Safety Code: PGDISM-01

#### **Important Instructions**

- 1. Why is industrial safety important for today? Illustrate its relevance in manufacturing industry.
- 2. Define loss control. What are the basic principles of loss control?
- 3. How ergonomics affects the performance of employees? Illustrate.
- 4. Explain various principles of industrial safety management. .

Course: Industrial Toxicology, Environmental Pollution and Occupational Health

Code: PGDISM-02

#### **Important Instructions**

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

- 1. What are the causes and signs of stress in occupation environment? Suggest the measures of prevention of stress at work.
- 2. Discuss the nature and types of industrial toxicology. Suggest some remedial measures for diseases caused by certain chemicals.
- 3. What do you mean by fatigue? What are the control and remedial measures for overcoming fatigue?
- 4. Write a detail note on water pollution caused by industrial activities. How it can be prevented?

#### **Assignment-II**

Course: Industrial Toxicology, Environmental Pollution and Occupational Health

Code: PGDISM-02

#### **Important Instructions**

- 1. How do you define work load? What are the work-factors governing work load on mental work?
- 2. Briefly explain the concept of industrial toxicology. Discuss its relationship with occupational health.
- 3. What are occupational health problems? Outline the personal and medical control of occupational diseases.
- 4. Define loss control and explain the basic principles of loss control.

Code: PGDISM-03

Code: PGDISM-03

**Course: Industrial Hazards and Accidents** 

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

- 1. Discuss the prevention measures related to housekeeping, working cloths and personal protective equipments.
- 2. Illustrate the preventions measures regarding machine guarding and fire explosions.
- 3. What would be done if (a) pressure vessel ruptures and (b) discharges from safety valves?
- 4. Write a detail note on chemical hazards and its impact on health.

**Assignment-II** 

**Course: Industrial Hazards and Accidents** 

**Important Instructions** 

- 1. What is meant by industrial hazards and accidents? How can internal transport and safety be assured for prevention of industrial hazards? Explain.
- 2. Discuss the preventions and control measures for electrical hazards.
- 3. What would be done if (a) over heating due to electric power and (b) flammable liquid fuels?
- 4. Write a note on the maintenance of personal protective equipments and their usage in controlling industrial accidents.

Code: PGDISM-04

Code: PGDISM-04

**Course: Safety Management and Organization** 

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

- 1. What are the responsibilities of plant managers, foremen and supervisors with regard to organization for safety management?
- 2. In a hypothetical organization, outline the steps to formulate planning for safety management.
- 3. Is work centered approach to employee centered approach different? Which one is better and why?
- 4. Define industrial safety management. Discuss various approaches and principles of industrial safety management.

#### **Assignment-II**

**Course: Safety Management and Organization** 

**Important Instructions** 

- 1. Define communication which method of communication is most effective and why in safety management.
- 2. How behavioral sciences and safety is connected? Explain.
- 3. Write in brief the problem analysis and decision making.
- 4. What are the various theories of motivation? Discuss their relevance to the field of safety management.

Code: PGDISM-05

**Course: Safety Statistics and Accident Inspection** 

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each

question carries 5 marks and the total marks are 15.

1. Discuss the role, application and scope of statistics in safety management and accident

inspection.

2. Elaborate the steps to calculate values central tendencies and standard deviation in general.

Illustrate.

3. Discuss in brief the additive and multiplicative rules of probability. How it is useful in managing

accidents in industries.

4. What is a hypothesis? Explain the relevance and importance of test of significance.

**Assignment-II** 

**Course: Safety Statistics and Accident Inspection** 

Code: PGDISM-05

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each

question carries 5 marks and the total marks are 15.

1. Explain various methods to calculate measures of central tendency? How it is important in

computing the accidental losses?

2. Highlight the usage of correlation in safety management and accidents in industries.

3. What is the need of safety check list and safety permit system? Illustrate with real life case of a

hypothetical organization.

4. Discuss in brief the accidents investigating techniques. Which is better and why?

Course: Safety Legislation, Codes and Workmen's Compensation Pertaining to Factories, Boilers

and their Administration

**Code: PGDISM-06** 

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

1. Discuss in short the safety provisions of Boiler Act, 1923.

2. Explain the role of Director General in administration for Factories Act, 1923.

3. What are the provisions for safety and health under Factories Act, 1948 with reference to Bihar factory Rules?

4. Discuss the role ILO in promoting the uniform safety standards.

**Assignment-II** 

Course: Safety Legislation, Codes and Workmen's Compensation Pertaining to Factories, Boilers and their Administration

**Code: PGDISM-06** 

**Important Instructions** 

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

1. Discuss the role ILO in the field of safety promotion.

2. Discuss in short the provisions of Workmen's Compensation Act, 1923.

3. Critically appraise the rules and regulations related to safety in chemical industry.

4. Briefly explain the codes, rules and regulations in construction industry.

**Course: Computer Application in Safety Management** 

Code: PGDISM-07

#### **Important Instructions**

Attempt three questions from the assignment given below. All questions are to be attempted in legible handwriting on plane white A 4 size papers and handed over for evaluation to the study centres concerned. Each question carries 5 marks and the total marks are 15.

- 1. Explain the role of computers in industrial safety. Illustrate with some real life examples from industry.
- 2. Define programming. Write its application for the organizations for the purpose of industrial safety.
- 3. What is meant by a database? Explain the need and application of DBMS industrial safety.
- 4. Why feasibility studies are done in industrial safety? Discuss the types and role of feasibility studies for safety purpose.

#### **Assignment-II**

**Course: Computer Application in Safety Management** 

Code: PGDISM-07

#### **Important Instructions**

- 1. What are the evolving methodologies for the analysis, design and development of a helpdesk system?
- 2. Define spread sheet. Write its application for the organizations for the purpose of managing data related to safety.
- 3. In any hypothetical organization discuss the steps taken to develop a fool proof DBMS for promoting industrial safety.
- 4. Illustrate the principles for prteparing effective presentation with the help of computers. Also expalin some software programmes for ensuring industrial safety in organisation.