

ASSIGNMENT BOOKLET

**POST GRADUATE CERTIFICATE IN INDUSTRIAL SAFETY
(PGCINDS)**

Last date for submission:

30th October for July 2026 Session

**School of Engineering and Technology
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068**

Dear Student,

We advise you to go through your course material carefully and read all the sections pertaining to assignments. As you are aware, a weightage of 30 per cent of marks, has been earmarked for continuous evaluation which would consist of **one tutor-marked assignment** for each of MIS021, MIS022, MIS023 & MIS024 courses. You have to score a minimum of 40 marks out of 100 marks in each of the assignment. **Submit your assignments at your respective Regional Centre. Any Queries related to Assignments send strictly to the email ID: pgdinds@ignou.ac.in**

Instructions for Submitting Your Assignments

Before attempting the assignment, please read the following instructions carefully.

- 1) On top of the first page of your TMA answer sheet, please write the details exactly in the following format:

ENROLMENT NO:

NAME:

ADDRESS:

.....

Email ID :

COURSECODE:

COURSETITLE:

PROGRAMME:

STUDYCENTRE: **DATE:**.....

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2) Use only full size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 2 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) **Only hand written answers are acceptable. Do not submit typed or photocopied answers.**
- 6) While solving problems, clearly indicate the question number along with the part being solved. Be precise. Recheck your work before submitting it.
- 7) **You must attach copy of your Student Id Card with your assignments.**

Answer sheets received after the due date shall not be accepted.

We strongly feel that you should retain a copy of your assignment response to avoid any unforeseen situations and append, if possible, a photocopy of this booklet with your response.

We wish you good luck.

Assignment -4
(To be done **after** studying the course material)

Course Code: MIS-024
Course Title: Mechanical and Electrical Safety Management
Assignment Code: MIS-024/TMA/2026
Maximum Marks: 100
Last Date of Submission: October 30, 2026

Note: Attempt all questions. All questions carry equal marks.

Q.1	Explain the objectives and methodology of Job Safety Analysis (JSA). Discuss its importance in preventing industrial accidents with suitable examples.	10
Q.2	Describe different types of machine guards. Explain the principles of machinery safeguarding and their role in preventing accidents.	10
Q.3	Explain the hazards associated with manual and mechanical material handling. Discuss preventive measures and safe material handling practices in industries.	10
Q.4	Discuss the principles of safe machine design and ergonomic considerations in machinery. Explain the importance of work permit systems and lockout procedures.	10
Q.5	Explain the causes of electrical accidents in industries. Discuss electrical hazards and suitable preventive measures for ensuring workplace safety.	10
Q.6	Describe different types of fire hazards associated with electrical installations. Explain the methods of fire prevention and firefighting systems used in industries.	10
Q.7	Discuss the safety requirements of electrical equipment. Explain the importance of earthing, insulation, circuit protection and relevant provisions of the Indian Electricity Rules.	10
Q.8	Explain the principles of first aid for victims of electric shock, burns and other industrial injuries. Discuss the role of first aid in emergency response.	10
Q.9	Analyse a case study involving a machinery or electrical accident. Identify the root causes and recommend suitable corrective and preventive measures.	10
Q.10	Explain the importance of integrating mechanical safety and electrical safety in developing an effective industrial safety management system.	10