

SRM VALLIAMMAI ENGINEERING COLLEGE

SRM Nagar, Kattankulathur – 603 203

DEPARTMENT OF MECHANICAL ENGINEERING

QUESTION BANK



VII SEMESTER

MME201- INDUSTRIAL SAFETY

Regulation – 2023

Academic Year 2026 – 27

Prepared by

Mr. G.ANANTH , Assistant Professor (Sel.G) / Mech
Dr. R.SRINIVASAN , Assistant Professor (Sr.G) / Mech
Mr. G.LOKESH , Assistant Professor (O.G) / Mech
Mr. M.VADIVEL , Assistant Professor (O.G) / Mech

UNIT I BASICS OF SAFETY ENGINEERING & ACTS

Evolution of modern safety concept – Safety audit – Acts: Factories act – 1948 – Statutory authorities – Tamil Nadu factories Rules 1950 under safety and health – Environment act – 1986 – Air act 1981, Water act 1974 – other acts; Safety in industries – General safety concepts, machine guarding, hazards in metal removing process, welding process, cold and hot working process. Introduction to Electrical Acts.

S. No.	PART A: 2-Mark Questions	BT Level	Competence
1	Define the modern safety concept.	BT-1	Remember
2	What is a Safety Audit?	BT-1	Remember
3	State the main objective of the Factories Act, 1948.	BT-1	Remember
4	Who is an 'Occupier' under the Factories Act, 1948?	BT-1	Remember
5	Name any four statutory authorities enforcing safety regulations in India.	BT-1	Remember
6	Mention two key health provisions under the Tamil Nadu Factories Rules, 1950.	BT-1	Remember
7	What triggered the enactment of the Environment (Protection) Act, 1986?	BT-2	Understand
8	State the primary goal of the Air (Prevention and Control of Pollution) Act, 1981.	BT-1	Remember
9	What is the scope of the Water Act, 1974?	BT-2	Understand
10	Define machine guarding.	BT-1	Remember
11	What is point-of-operation guarding?	BT-1	Remember
12	List two common hazards in metal removing processes (e.g., Lathe work).	BT-1	Remember
13	What is occupational dermatitis, and how does it occur in machining?	BT-2	Understand
14	Mention two physical hazards associated with the welding process.	BT-1	Remember
15	Name two toxic fumes generated during welding.	BT-1	Remember
16	What is a hot working process?	BT-1	Remember
17	Give two safety precautions for hot working processes.	BT-1	Remember
18	What is a cold working process?	BT-1	Remember
19	Identify two hazards specific to cold working processes.	BT-1	Remember
20	What is the basic purpose of the Indian Electricity Rules/Acts in industries?	BT-2	Understand
21	Define an 'accident' in an industrial context.	BT-1	Remember
22	What is an interlock guard?	BT-1	Remember
23	Under the Factories Act, 1948, when is a Safety Officer mandatory?	BT-1	Remember
24	What are the penalties for violating the Environment (Protection) Act, 1986?	BT-1	Remember
25	Distinguish between a hazard and a risk.	BT-4	Analyze
S. No.	PART B: 16-Mark Questions	BT Level	Competence
1	Trace the evolution of the modern safety concept. How does it differ from traditional safety approaches?	BT-4	Analyze
2	Explain the concept of a Safety Audit. Discuss its types, methodology, and benefits in an industrial setup.	BT-2	Understand
3	Elaborate on the provisions regarding Health, Safety, and Welfare of workers as stipulated in the Factories Act, 1948.	BT-2	Understand
4	Discuss the roles, powers, and responsibilities of Statutory Authorities under the Factories Act and Environmental Acts.	BT-2	Understand
5	Critically review the Tamil Nadu Factories Rules, 1950, highlighting specific state-level safety and health requirements.	BT-5	Evaluate
6	Explain the salient features and the broad framework of the Environment (Protection) Act, 1986.	BT-2	Understand

7	Discuss the Air (Prevention and Control of Pollution) Act, 1981, focusing on industrial compliance.	BT-2	Understand
8	Detail the Water (Prevention and Control of Pollution) Act, 1974. How does it manage industrial effluents?	BT-4	Analyze
9	What is machine guarding? Describe the principles of machine guarding and explain five common types of guards with their applications.	BT-2	Understand
10	Outline the general safety concepts applied in modern manufacturing industries.	BT-2	Understand
11	Discuss in detail the hazards associated with metal removing processes (machining) and the corresponding safety measures.	BT-4	Analyze
12	Explain the various health and safety hazards in welding processes and detail the necessary preventive measures.	BT-4	Analyze
13	Differentiate between Hot Working and Cold Working processes. Elaborate on their specific hazards and control strategies.	BT-4	Analyze
14	Introduce the Electrical Acts/Rules in India. Explain the fundamental statutory requirements for electrical safety in industrial plants.	BT-2	Understand
15	Analyze how the Factories Act, 1948 and the Environment (Protection) Act, 1986 complement each other in an industrial context.	BT-4	Analyze
16	Design a comprehensive safety audit checklist for a factory involving heavy machining and welding operations.	BT-6	Create
17	Discuss the hierarchy of hazard controls with specific examples applied to a mechanical manufacturing process.	BT-3	Apply
18	Explain the legal and procedural requirements for handling hazardous substances under the major industrial acts.	BT-2	Understand

UNIT II SAFETY MANAGEMENT

History of Safety movement –Evolution of modern safety concept General concepts of management – Planning for safety for optimization of productivity, quality and safety line and staff functions for safety, budgeting for safety policy. Incident Recall Technique (IRT), disaster control, job safety analysis, safety survey, safety inspection, safety sampling, evaluation of performance of supervisors on safety.

S. No.	PART A: 2-Mark Questions	BT Level	Competence
1	What was the primary catalyst for the early safety movement?	BT-1	Remember
2	How has the modern safety concept evolved from its earlier forms?	BT-4	Analyze
3	Define 'Management' in the context of industrial safety.	BT-1	Remember
4	Why is planning for safety essential in an industry?	BT-2	Understand
5	How are productivity, quality, and safety interrelated?	BT-4	Analyze
6	What is a 'Line Function' in safety management?	BT-1	Remember
7	What is a 'Staff Function' in safety management?	BT-1	Remember
8	Define 'Budgeting for Safety'.	BT-1	Remember
9	What is a Safety Policy?	BT-1	Remember
10	Name the key elements of a standard Safety Policy.	BT-1	Remember
11	What is the Incident Recall Technique (IRT)?	BT-1	Remember
12	State the main advantage of using the Incident Recall Technique.	BT-2	Understand
13	Define Disaster Control in an industrial context.	BT-1	Remember
14	What is a Job Safety Analysis (JSA)?	BT-1	Remember
15	List the four basic steps of a Job Safety Analysis.	BT-1	Remember
16	What is a Safety Survey?	BT-1	Remember
17	Define Safety Inspection.	BT-1	Remember
18	Differentiate between a Safety Inspection and a Safety Audit.	BT-4	Analyze
19	What is Safety Sampling?	BT-1	Remember
20	What is the primary purpose of Safety Sampling?	BT-2	Understand
21	Why is it important to evaluate the performance of supervisors on safety?	BT-5	Evaluate
22	List two metrics used to evaluate a supervisor's safety performance.	BT-1	Remember
23	What is an On-Site Emergency Plan?	BT-1	Remember
24	Who is responsible for drafting the Safety Policy of a company?	BT-1	Remember
25	Mention one limitation of the Incident Recall Technique.	BT-2	Understand
S. No.	PART B: 16-Mark Questions	BT Level	Competence
1	Trace the history of the safety movement and explain the evolution of the modern safety concept.	BT-4	Analyze
2	Discuss the general concepts of management as applied to safety management in an industry.	BT-2	Understand
3	"Planning for safety optimizes productivity, quality, and safety." Justify this statement with practical industrial examples.	BT-5	Evaluate
4	Elaborate on the Line and Staff functions for safety. Discuss the potential areas of conflict and how to resolve them.	BT-4	Analyze
5	Explain the importance of budgeting for a safety policy. What are the key elements considered while preparing a safety budget?	BT-4	Analyze
6	Detail the formulation, implementation, and review of a Safety Policy in an organization.	BT-2	Understand
7	Describe the Incident Recall Technique (IRT). How is it executed, and what are its benefits and limitations?	BT-4	Analyze
8	What is Disaster Control? Outline the structure of a comprehensive industrial disaster management plan.	BT-2	Understand

9	Define Job Safety Analysis (JSA). Perform a hypothetical JSA for a worker performing a grinding operation on a metal casting.	BT-3	Apply
10	What is a Safety Survey? Discuss its objectives, methodology, and how it differs from a general safety inspection.	BT-4	Analyze
11	Discuss the procedure for conducting an effective Safety Inspection in a manufacturing plant. What should a standard checklist include?	BT-3	Apply
12	Explain Safety Sampling in detail. How is it calculated, and how does it help in evaluating the safety culture of an organization?	BT-3	Apply
13	Evaluate the role and importance of evaluating the performance of supervisors on safety. Discuss the methods and metrics used for this evaluation.	BT-5	Evaluate
14	Compare and contrast Incident Recall Technique (IRT), Safety Survey, and Safety Sampling as proactive monitoring tools.	BT-4	Analyze
15	Describe the structure and functioning of Line and Staff organizations in implementing a safety management system.	BT-2	Understand
16	Outline the steps involved in planning for disaster control in a chemical process industry.	BT-6	Create
17	Discuss how a well-structured Safety Policy drives the safety culture of an organization.	BT-4	Analyze
18	Case Study Application: A manufacturing plant is experiencing a high rate of hand injuries on its assembly line. As a Safety Manager, how would you utilize JSA, Safety Inspections, and Supervisory Evaluation to solve this issue?	BT-3	Apply

UNIT III ACCIDENT INVESTIGATION AND REPORTING

Concept of an accident, reportable and non-reportable accidents, unsafe act and condition – Principles of accident prevention, Supervisory role - Role of safety committee – Accident causation models Cost of accident. Overall accident investigation process Response to accidents, India reporting requirement, Planning document, Planning matrix, Investigators Kit, Functions of investigator, Four types of evidences, Records of accidents, Accident reports Class exercise with case study.

S. No.	PART A: 2-Mark Questions	BT Level	Competence
1	Define the concept of an accident.	BT-1	Remember
2	What is a reportable accident?	BT-1	Remember
3	What constitutes a non-reportable accident?	BT-1	Remember
4	Define an 'Unsafe Act' and give an example.	BT-2	Understand
5	Define an 'Unsafe Condition' and give an example.	BT-2	Understand
6	State the core principle of accident prevention.	BT-1	Remember
7	What is the primary role of a supervisor in accident prevention?	BT-2	Understand
8	What is a Safety Committee?	BT-1	Remember
9	Name any two accident causation models.	BT-1	Remember
10	Briefly state Heinrich's Domino Theory.	BT-2	Understand
11	What are the 'direct costs' of an accident?	BT-1	Remember
12	Give two examples of 'indirect (hidden) costs' of an accident.	BT-1	Remember
13	What is the first step in responding to an accident?	BT-3	Apply
14	What is the statutory reporting requirement for fatal accidents in India?	BT-1	Remember
15	What is a Planning Document in accident investigation?	BT-1	Remember
16	What is a Planning Matrix in this context?	BT-1	Remember
17	List four essential items in an Investigator's Kit.	BT-1	Remember
18	What is the primary function of an accident investigator?	BT-2	Understand
19	What are the four types of evidence collected in an investigation (The 4 Ps)?	BT-1	Remember
20	Give an example of 'Parts' (Physical) evidence.	BT-1	Remember
21	Give an example of 'Paper' (Documentary) evidence.	BT-1	Remember
22	Why is 'Position' evidence highly perishable?	BT-4	Analyze
23	Why is maintaining accident records important?	BT-5	Evaluate
24	What is the purpose of the final accident report?	BT-2	Understand
25	Distinguish between an accident and a near-miss.	BT-4	Analyze
S. No.	PART B: 16-Mark Questions	BT Level	Competence
1	Define an accident. Distinguish in detail between unsafe acts and unsafe conditions, providing industrial examples and explaining their contribution to accidents.	BT-4	Analyze
2	Explain the difference between reportable and non-reportable accidents. Detail the statutory reporting requirements for accidents in India under the Factories Act, 1948.	BT-2	Understand
3	Discuss the fundamental principles of accident prevention. Elaborate on the critical role a supervisor plays in maintaining workplace safety.	BT-4	Analyze
4	What is a Safety Committee? Detail its constitution, functions, and its significance in fostering a proactive safety culture.	BT-5	Evaluate
5	Explain the concept of Accident Causation Models. Discuss Heinrich's Domino Theory in detail, including its impact on modern safety management.	BT-4	Analyze
6	Discuss the Multiple Causation Theory and Reason's Swiss Cheese Model. How do they provide a better framework for complex industrial accidents?	BT-5	Evaluate

7	"The true cost of an accident is like an iceberg." Justify this statement by explaining the direct and indirect costs of accidents in an industry.	BT-5	Evaluate
8	Outline the overall Accident Investigation Process from the moment an incident occurs to the implementation of preventive measures.	BT-3	Apply
9	Describe the immediate response protocols to be followed when a major industrial accident occurs.	BT-3	Apply
10	What are the key functions and necessary skills of an accident investigator? Who should ideally be part of an investigation team?	BT-4	Analyze
11	Explain the significance of the Planning Document and the Planning Matrix in structuring an accident investigation.	BT-5	Evaluate
12	What is an Investigator's Kit? Detail its contents and explain how each item is utilized at an accident scene.	BT-3	Apply
13	Detail the four types of evidence (The 4 Ps) collected during an accident investigation, explaining the methods to gather each.	BT-4	Analyze
14	Discuss the principles of conducting effective witness interviews during an accident investigation to gather reliable testimonial evidence.	BT-3	Apply
15	Outline the structure and essential components of a formal Accident Investigation Report.	BT-6	Create
16	Class Exercise/Case Study: An operator's hand was crushed in a conveyor belt while trying to clear a jam while the machine was running. Develop an investigation plan addressing immediate response, evidence collection, and possible root causes.	BT-6	Create
17	Class Exercise/Case Study: A forklift carrying a chemical drum tipped over on a wet factory floor, causing a toxic spill. Apply the Swiss Cheese Model to identify the layers of failure.	BT-3	Apply
18	After an investigation identifies the root causes, how should an organization manage Corrective and Preventive Actions (CAPA)?	BT-3	Apply

UNIT IV SAFETY PERFORMANCE MONITORING

Reactive and proactive monitoring techniques, Permanent total disabilities, Permanent partial disabilities, Temporary total disabilities - Calculation of accident indices, Frequency rate, Severity rate, Frequency severity incidence, Incident rate, Accident rate, Safety "t" score, Safety activity rate problems

S. No.	PART A: 2-Mark Questions	BT Level	Competence
1	Define safety performance monitoring.	BT-1	Remember
2	What is reactive monitoring in safety?	BT-1	Remember
3	Give two examples of reactive monitoring techniques.	BT-1	Remember
4	What is proactive monitoring in safety?	BT-1	Remember
5	Give two examples of proactive monitoring techniques.	BT-1	Remember
6	Define Permanent Total Disability (PTD).	BT-1	Remember
7	Define Permanent Partial Disability (PPD).	BT-1	Remember
8	Define Temporary Total Disability (TTD).	BT-1	Remember
9	What are "Scheduled Charges" in accident severity calculations?	BT-2	Understand
10	What are accident indices?	BT-1	Remember
11	Write the formula for Accident Frequency Rate (AFR).	BT-1	Remember
12	What does Accident Severity Rate (ASR) indicate?	BT-2	Understand
13	Write the formula for Accident Severity Rate (ASR).	BT-1	Remember
14	What is Frequency Severity Incidence (FSI)?	BT-1	Remember
15	Write the formula for Frequency Severity Incidence (FSI).	BT-1	Remember
16	Define Incident Rate (IR).	BT-1	Remember
17	Write the formula for Incident Rate.	BT-1	Remember
18	Define Accident Rate.	BT-1	Remember
19	What is the Safe-T-Score?	BT-1	Remember
20	Write the formula for Safe-T-Score.	BT-1	Remember
21	How do you interpret a Safe-T-Score between -2.00 and +2.00?	BT-2	Understand
22	What does a Safe-T-Score of less than -2.00 indicate?	BT-2	Understand
23	What does a Safe-T-Score of more than +2.00 indicate?	BT-2	Understand
24	What is the Safety Activity Rate?	BT-1	Remember
25	Why do we use standard multipliers (like 1,000,000) in these formulas?	BT-4	Analyze
S. No.	PART B: 16-Mark Questions	BT Level	Competence
1	Critically compare Reactive and Proactive monitoring techniques in safety management. Why is a combination of both essential for modern industries?	BT-5	Evaluate
2	Elaborate on the different types of occupational disabilities (PTD, PPD, TTD) as defined in industrial safety standards. How are scheduled charges applied to them?	BT-4	Analyze
3	Explain the various Accident Indices used to measure safety performance. Provide the definition, formula, and significance of AFR, ASR, FSI, and IR.	BT-2	Understand
4	What is a Safe-T-Score? Explain its statistical significance, formula, and interpretation with a hypothetical example.	BT-3	Apply
5	Discuss the concept of the Safety Activity Rate. Why is it considered a superior proactive monitoring tool compared to traditional indices?	BT-5	Evaluate
6	Problem Calculation: Basic Accident Indices. An engineering plant employs 500 workers. In a given year, they worked 50 weeks at 48 hours per week. During the year, there were 15 reportable accidents. The total number of man-days lost due to these accidents was 450. Calculate: 1) Total man-hours worked, 2) Accident Frequency Rate (AFR), 3) Accident Severity Rate (ASR), 4) Frequency Severity Incidence (FSI), 5) Incident Rate per 1000 workers.	BT-3	Apply

7	Problem Calculation: Involving Scheduled Charges. A factory worked 2,500,000 man-hours in 2023. They experienced 20 lost-time accidents. Out of these, 18 were Temporary Total Disabilities (TTD) resulting in a combined loss of 250 days. 1 accident resulted in the amputation of a hand (PPD, scheduled charge = 3,000 days). 1 accident resulted in a fatality (PTD, scheduled charge = 6,000 days). Calculate the AFR and ASR.	BT-3	Apply
8	Problem Calculation: Safe-T-Score. In 2022, a company had an Accident Frequency Rate (AFR) of 18.5. In 2023, the company ramped up production, working a total of 1,500,000 man-hours, and recorded 22 lost-time accidents. Calculate the AFR for 2023 and the Safe-T-Score. Interpret the result to advise management if their safety performance actually improved.	BT-3	Apply
9	Problem Calculation: Finding Missing Variables. A chemical plant recorded an Accident Severity Rate (ASR) of 450 and an Accident Frequency Rate (AFR) of 15 during a year where they experienced 30 reportable accidents. Calculate: 1) The total man-hours worked, 2) The total number of man-days lost, 3) The Frequency Severity Incidence (FSI).	BT-3	Apply
10	Problem Calculation: Multi-Department Comparison. A manufacturing unit has two main departments. Dept A (Production) worked 800,000 man-hours with 16 accidents. Dept B (Maintenance) worked 200,000 man-hours with 8 accidents. 1) Calculate the AFR for Dept A, Dept B, and the overall Plant AFR. 2) Which department has a poorer safety record?	BT-4	Analyze
11	Outline the procedure for recording occupational accidents according to IS 3786 / standard reporting practices. Why is uniformity in data collection critical for calculating indices?	BT-4	Analyze
12	Problem Calculation: Safety Activity Rate vs. AFR. A construction site worked 500,000 man-hours. They had 5 lost-time accidents. During the same period, workers submitted 150 hazard observation reports, managers conducted 25 safety walk-throughs, and 75 near-misses were reported and closed out. Calculate the Accident Frequency Rate and the Safety Activity Rate. Discuss how these two metrics tell different stories. Calculate the Accident Frequency Rate and the Safety Activity Rate. Discuss how these two metrics tell different stories.	BT-4	Analyze
13	Evaluate the limitations of using only Reactive Monitoring (like AFR and ASR) to judge a company's safety performance.	BT-5	Evaluate
14	Discuss the purpose and calculation of Frequency Severity Incidence (FSI). Provide a numerical example demonstrating how FSI resolves conflicts between AFR and ASR.	BT-4	Analyze
15	Problem Calculation: Comprehensive Yearly Safety Report. A petrochemical complex with 2,000 employees worked an average of 2,400 hours per employee in a year. The safety log shows: 100 First Aid cases; 15 Temporary Total Disabilities (total 300 days lost); 1 Amputation (PTD, schedule charge 3000 days); 1 Fatality (schedule charge 6000 days). Calculate: Total Man-hours, AFR, ASR, Incident Rate. (Note: First Aid cases are not lost-time accidents). Calculate: Total Man-hours, AFR, ASR, Incident Rate.	BT-3	Apply
16	Develop a comprehensive framework for a company transitioning from a purely reactive monitoring system to a proactive monitoring system. What KPIs should they track?	BT-6	Create
17	Explain the concept of "Man-days lost". How is it calculated in cases of temporary disability versus permanent disabilities?	BT-2	Understand
18	Problem Calculation: Multi-year Trend Analysis using Safe-T-Score. Year 1: 1,200,000 man-hours, 24 accidents. Year 2: 1,100,000 man-hours, 18 accidents. Year 3: 1,300,000 man-hours, 15 accidents. Calculate the AFR for all three years. 2) Calculate the Safe-T-Score comparing Year 1 to Year 2. 3) Calculate the Safe-T-Score comparing Year 2 to Year 3. Comment on the trend.	BT-4	Analyze

UNIT V SAFETY EDUCATION AND TRAINING

Importance of training identification of training needs training methods – programme, seminars, conferences, competitions – method of promoting safe practice motivation – communication role of government agencies and private consulting agencies in safety training – creating awareness, awards, celebrations, safety posters, safety displays, safety pledge, safety incentive scheme, safety campaign – Domestic Safety and Training.

S. No.	PART A: 2-Mark Questions	BT Level	Competence
1	What is the primary importance of safety training in an industry?	BT-2	Understand
2	Define Training Needs Assessment (TNA) in the context of safety.	BT-1	Remember
3	State two methods to identify safety training needs.	BT-1	Remember
4	How do seminars differ from conferences in safety training?	BT-4	Analyze
5	What is the role of safety competitions?	BT-2	Understand
6	Define 'motivation' in the context of safe work practices.	BT-1	Remember
7	Mention two barriers to effective safety communication.	BT-1	Remember
8	Name two key government agencies involved in safety training in India.	BT-1	Remember
9	What is the role of private consulting agencies in safety?	BT-2	Understand
10	How can an organization create safety awareness among new employees?	BT-3	Apply
11	What is the purpose of safety awards?	BT-2	Understand
12	When is National Safety Day celebrated in India, and why?	BT-1	Remember
13	What makes an effective safety poster?	BT-2	Understand
14	What is a safety display?	BT-1	Remember
15	What is a Safety Pledge?	BT-1	Remember
16	What is a safety incentive scheme?	BT-1	Remember
17	What is a major pitfall of a poorly designed safety incentive scheme?	BT-5	Evaluate
18	Define a safety campaign.	BT-1	Remember
19	What is Domestic Safety?	BT-1	Remember
20	Mention two common causes of domestic accidents.	BT-1	Remember
21	Why is domestic safety training important for industrial workers?	BT-5	Evaluate
22	What is toolbox training (toolbox talk)?	BT-1	Remember
23	What is Refresher Training?	BT-1	Remember
24	Give an example of a visual communication tool in safety.	BT-1	Remember
25	How do you evaluate the effectiveness of safety training?	BT-5	Evaluate
S. No.	PART B: 16-Mark Questions	BT Level	Competence
1	Discuss in detail the importance and objectives of safety education and training in a modern manufacturing industry.	BT-4	Analyze
2	Explain the systematic process of Identifying Training Needs (TNA) for safety in an organization.	BT-4	Analyze
3	Describe the various methods of safety training. How does an organization choose the appropriate method for its workforce?	BT-5	Evaluate
4	Evaluate the use of Seminars, Conferences, and Competitions as tools for safety education.	BT-5	Evaluate
5	"Motivation is the psychological engine of safe practice." Discuss various methods of promoting safe practice motivation among industrial workers.	BT-4	Analyze
6	Explain the role of communication in safety management. What are the common barriers to safety communication, and how can they be overcome?	BT-4	Analyze
7	Discuss the role of Government agencies in promoting and providing safety training in India.	BT-2	Understand
8	Analyze the role and benefits of Private Consulting Agencies in enhancing industrial safety training.	BT-4	Analyze

9	Explain the concept of 'Creating Awareness' in safety. Detail a multi-pronged approach to sustain safety awareness throughout the year.	BT-6	Create
10	Discuss the significance of Awards and Celebrations (like National Safety Day) in an industrial safety program.	BT-5	Evaluate
11	Evaluate the effectiveness of visual communication tools like Safety Posters and Safety Displays. What are the principles of designing them effectively?	BT-5	Evaluate
12	What is a Safety Pledge? Discuss its psychological impact and how it can be integrated into an organization's safety culture.	BT-4	Analyze
13	Critically analyze Safety Incentive Schemes. How should they be designed to promote genuine safety rather than under-reporting of accidents?	BT-5	Evaluate
14	You are tasked with designing a month-long 'Safety Campaign' on 'Fire Prevention' for a chemical plant. Outline your step-by-step strategy.	BT-6	Create
15	Elaborate on the concept of Domestic Safety. What are the common hazards in a household, and how can they be mitigated?	BT-2	Understand
16	Why should industrial management invest in Domestic Safety Training for their employees? Outline a basic domestic safety training module.	BT-5	Evaluate
17	Discuss the complete lifecycle of a Safety Training Programme, from conception to evaluation.	BT-4	Analyze
18	Explain how to evaluate the effectiveness of a safety training programme using Kirkpatrick's Four-Level Evaluation Model.	BT-5	Evaluate