

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

PG DIPLOMA EXAMINATION DECEMBER 2023
(First Semester)

Branch - PG DIPLOMA IN INDUSTRIAL SAFETY

SAFETY IN INDUSTRIES

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which are the advantages of maintaining good housekeeping practices in the workplace? a) Increased chaos and confusion b) Higher accident rates c) Improved safety, efficiency, and morale d) Reduced productivity	K1	CO1
	2	Show the primary purpose of machine guarding a) To decorate machines b) To prevent accidents and protect workers c) To slow down production d) To make machines more challenging to operate	K2	CO2
2	3	What is a Class C fire? a) Fire involving paper and wood b) Fire involving flammable liquids c) Fire involving electrical equipment d) Fire involving metals	K1	CO2
	4	When might a water spray system be used in fire protection? a) To suppress fires involving electrical equipment b) To extinguish fires in flammable liquids c) To provide cooling in chemical storage areas d) To Hire installation	K2	CO1
3	5	What is the patella? a) Vests b) Lanyards c) Apron d) Kneecap	K1	CO1
	6	Which practice of shaping the primary field of ionizing radiation? a) Collimation b) Excitation c) Primary Radiation d) Secondary Radiation	K2	CO2
4	7	The term "Human Error Rate" defined in the context of THERP? a) The percentage of accidents caused by human errors. b) The frequency of a specific error occurring in a given task. c) The financial cost of human errors in the workplace. d) The rate of human error occurrence in working places	K1	CO1
	8	What safety measures in the Bhopal plant were either malfunctioning? a) Security cameras b) Flaring systems c) Communication devices d) Office furniture	K2	CO2
5	9	What does OSHA stand for? a) Occupational Safety and Health Administration b) Occupational Standards and Hazard Assessment c) Office of Safety and Health Accountability d) Occupational Security and Health Association	K1	CO1
	10	What is the primary purpose of a Permit to Work (PTW) in an organization? a) To grant permission for routine tasks b) To regulate employee dress code c) To issue permission for hazardous or non-routine tasks d) To track employee attendance	K2	CO2

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SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Assess an efficient plant layout contribute to improved productivity and worker safety.	K4	CO4
	(OR)			
	11.b.	National Building Code is to regulate construction and building safety standards – Justify.		
2	12.a.	Describe the different types of fires and the materials they involve.	K3	CO4
	(OR)			
	12.b.	Explain the early detection and alarm systems improve response time during a fire emergency.		
3	13.a.	List out the importance of PPE in the workplace and its primary purpose.	K3	CO5
	(OR)			
	13.b.	Classify the types of respiratory protective devices and its uses.		
4	14.a.	Organize the role of management in preventing major accidents and ensuring the safety of workers and the public.	K4	CO4
	(OR)			
	14.b.	Apply the principles of electrical safety and the approaches used to prevent accidents related to electrical systems.		
5	15.a.	Discuss the common accidents and safety risks associated with various types of maintenance activities.	K5	CO5
	(OR)			
	15.b.	Explain the significance of work permit system.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discuss the potential hazards associated with poor housekeeping practices in an industrial setting.	K4	CO5
2	17	Explain in detail about the BLEVE and UVCE.	K5	CO5
3	18	Identify the non - respiratory personal protective devices for body protection.	K5	CO3
4	19	Analyze on site emergency planning and off- site emergency planning.	K4	CO4
5	20	Construct the methods and criteria for evaluating and reviewing the effectiveness of safety training programs.	K4	CO5

Z-Z-Z

END