

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

PGDIS DEGREE EXAMINATION MAY 2025  
(Second Semester)

Branch – PG DIPLOMA IN INDUSTRIAL SAFETY

**MAJOR ELECTIVE COURSE – II INDUSTRIAL HYGIENE & OCCUPATIONAL  
HEALTH**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Question No.	Question	K Level	CO
1	What does TLV stand for in occupational health? (a) Toxic Level Variation (c) Threshold Limit Value (b) Total Lethal Volume (d) Temporary Limit Value	K1	CO1
2	Why is it important to classify health hazards in the workplace? (a) To ensure employees wear uniforms (b) To improve the aesthetic of the workspace (c) To effectively identify, evaluate, and control risks (d) To increase product sales	K2	CO1
3	Which of the following is a type of ionizing radiation? (a) Gamma rays (c) Infrared (b) Microwave (d) Radio waves	K1	CO2
4	How does hypothermia occur in occupational settings? (a) Due to overexposure to UV rays (b) As a result of high humidity and heat (c) From exposure to laser radiation (d) When body temperature drops due to prolonged exposure to cold environments	K2	CO2
5	_____ is an example of a local exhaust ventilation method? (a) Fume hoods (c) Room air conditioning (b) Personal respirators (d) Ceiling fans	K1	CO2
6	Biological sampling important in chemical hazard monitoring, because _____ (a) It detects skin temperature changes (b) It helps track the amount of chemical absorbed into the body (c) It monitors noise levels in the workplace (d) It measures equipment temperature	K2	CO2
7	Carpal Tunnel Syndrome (CTS) affects _____ (a) Neck (b) Knee (c) Wrist (d) Foot	K1	CO3
8	How do biological safety cabinets protect lab personnel? (a) By filtering air and containing infectious agents (b) By providing clean water (c) By warning of earthquakes (d) By controlling room temperature	K2	CO3
9	_____ is associated with siderosis. (a) Lead (b) Iron (c) Aluminium (d) Nickel	K1	CO3

Cont...

10	_____ is the primary aim of cardio-pulmonary resuscitation (CPR) in occupational health emergencies. (a) To treat bone fractures (b) To enhance oxygen supply in normal breathing (c) To check lung infections (d) To restore heart and lung function during collapse	K2	CO4
----	---	----	-----

**SECTION - B (35 Marks)**

Answer ALL questions

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

Question No.	Question	K Level	CO
11.a.	Illustrate the control measures you would implement to minimize inhalation hazards in a welding workshop.	K3	CO1
	(OR)		
11.b.	Demonstrate how to use a MSDS to identify health hazards associated with a specific chemical.		
12.a.	Analyze the effectiveness of PPEs and administrative controls in managing heat stress.	K4	CO2
	(OR)		
12.b.	Differentiate the effects of ionizing and non-ionizing radiation on human health in occupational environment.		
13.a.	How do you implement the dose-relationship concepts in occupational health?	K3	CO3
	(OR)		
13.b.	Illustrate the causes and effects of various chemical hazards in an industrial environment.		
14.a.	Investigate how improper handling of laboratory animals could result in the spread of zoonotic diseases.	K4	CO4
	(OR)		
14.b.	Identify the possible ergonomic risk factors in a laboratory that could lead to musculoskeletal disorders.		
15.a.	Justify the inclusion of pre- and post-employment medical examinations.	K5	CO5
	(OR)		
15.b.	Propose a monitoring system for nickel and chromium exposure in manufacturing sectors.		

**SECTION - C (30 Marks)**

Answer ANY THREE questions

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

Question No.	Question	K Level	CO
16	Differentiate acute and chronic toxicity with examples.	K4	CO1
17	Assess the methods and applicability of noise control programs in occupational environment.	K5	CO2
18	Analyze the bio-chemical actions of toxic substances from industrial environment	K4	CO3
19	Appraise the effectiveness of training in preventing strain injuries among computer users.	K5	CO4
20	Classify occupational diseases into chemical, physical, and biological causes with suitable examples.	K4	CO5

Z-Z-Z

END