

Branch – ENVIRONMENTAL SCIENCE

MAJOR ELECTIVE COURSE – II OCCUPATIONAL HEALTH AND SAFETY

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	OHS primarily aims to (i) Increase production (ii) Protect workers' health and safety (iii) Reduce labour cost (iv) Increase working hours	K1	CO1
	2	Notifiable occupational diseases are reported to (i) WHO (ii) Employer only (iii) Government authorities (iv) Labour unions	K2	CO1
2	3	GHS is related to (i) Waste classification (ii) Chemical hazard classification (iii) Fire safety (iv) Radiation monitoring	K1	CO1
	4	Particulates, fumes, and mists are classified as (i) Physical hazards (ii) Chemical hazards (iii) Biological hazards (iv) Electrical hazards	K2	CO1
3	5	Ionizing radiation includes (i) Infrared rays (ii) Visible light (iii) X-rays and gamma rays (iv) Ultrasound	K1	CO1
	6	Earthing in electrical systems is used to (i) Increase voltage (ii) Reduce power loss (iii) Prevent electric shock (iv) Increase efficiency	K2	CO2
4	7	PPE for respiratory protection includes (i) Gloves (ii) Helmets (iii) Masks and respirators (iv) Safety shoes	K1	CO2
	8	Class B fire involves (i) Ordinary combustibles (ii) Flammable liquids (iii) Electrical equipment (iv) Metals	K2	CO2
5	9	TLV stands for (i) Total Load Value (ii) Threshold Limit Value (iii) Toxic Level Value (iv) Technical Limit Variable	K1	CO3
	10	OSHA refers to (i) Occupational Safety and Health Administration (ii) Occupational Safety Health Association (iii) Office of Safety and Health Authority (iv) Occupational Standards Health Act	K2	CO3

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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.	Explain the principles and objectives of Occupational Health and Safety.	K2	CO1
		(OR)		
	11.b.	Describe occupational health management services at the workplace.		
2	12.a.	Discuss chemical hazards and their control measures.	K3	CO2
		(OR)		
	12.b.	Explain radiation hazards and methods of protection.		
3	13.a.	Explain biological hazards and sterilization techniques.	K3	CO2
		(OR)		
	13.b.	Discuss electrical hazards and preventive measures.		
4	14.a.	Explain types and requirements of Personal Protective Equipment (PPE).	K4	CO3
		(OR)		
	14.b.	Describe fire classification and fire extinguishing techniques.		
5	15.a.	Discuss the salient features of NABL and OSHA related to occupational safety.	K4	CO3
		(OR)		
	15.b.	Explain safety training programmes and training cycle.		

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	Analyse the role of ergonomics and occupational hygiene in improving workplace health and productivity.	K4	CO1
2	17	Evaluate the potential routes of occupational exposures in industries and their long-term health impacts.	K5	CO1
3	18	Design a comprehensive Electrical hazards Safety Management Plan for an industry.	K6	CO3
4	19	Critically assess the effectiveness of PPE and engineering controls in preventing industrial accidents.	K5	CO2
5	20	Propose a National Occupational Safety Policy framework integrating OSHA, ILO, and Indian safety regulations.	K6	CO3

Z-Z-Z

END