

**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)**



M.Tech. (First Semester – Regular/Supplementary) Examinations, January– 2026
**24MTEPC1010 – Occupational Health and Hygiene Management
(Industrial Safety Engineering)**

Time: 3 hrs

Maximum: 60 Marks

(The figures in the right hand margin indicate marks)

PART – A**(2 x 5 = 10 Marks)**

Q.1. Answer <i>ALL</i> questions	CO #	Blooms Level
a. Classify occupational diseases based on their causative factors.	CO1	K3
b. Explain the different types of radiation hazards in the workplace.	CO2	K3
c. Summarize the basic principles of ergonomics used in workplace design.	CO3	K2
d. Differentiate between personal sampling and area monitoring techniques.	CO4	K2
e. Illustrate the functions of regulatory bodies in enforcing occupational health legislation.	CO6	K3

PART – B**(10 x 5 = 50 Marks)**Answer *ALL* the questions

	Marks	CO #	Blooms Level
2. a. Explain and discuss the concept, objectives, and scope of occupational health with suitable examples. (OR)	10	CO1	K3
b. Discuss the primary focus and methodological approach of each, and critique how they must work together to provide complete worker protection.	10	CO2	K4
3.a. Describe and discuss chemical hazards in the workplace, including gases, vapors, dusts, and fumes, with examples. (OR)	10	CO2	K3
b. Classify and explain control measures for physical hazards using the hierarchy of controls.	10	CO2	K3
4.a. Classify and explain common musculoskeletal disorders associated with poor workplace ergonomics. (OR)	10	CO3	K3
b. Evaluate the impact of ergonomic interventions on worker productivity and health.	10	CO4	K4
5.a. Examine how industrial hygiene data support decision-making in occupational health programs.	5	CO6	K4
b. Apply personal sampling and area monitoring methods to assess exposure in an industrial scenario. (OR)	5	CO5	K3
c. Classify and explain different types of exposure monitoring methods and their applications.	10	CO5	K3
6.a. Evaluate the role of accurate documentation and reporting in occupational health risk management.	10	CO5	K4

(OR)

- b. Describe various wellness promotion initiatives that can be implemented in occupational health programs. 10 CO5 K3

--- End of Paper ---