

JK Lakshmipat University Jaipur

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination, May, 2022
PhD/M. Tech. in Health Safety Environment, Semester-II

Roll No.....

Course Code : IL-2201

Time: 3 hours

Max. Marks: 30

Course Name: Occupational Hygiene and Health

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q 1	A department employee survey and subsequent ergonomic evaluation revealed a high risk "problem job" and ergonomic improvement opportunity for a press operator job at an automobile parts manufacturing facility. In the employee survey, several employees identified high levels of MSD risk at this operation. Out of nine operators rating the level of exertion of this job, five rated the exertion level at nine or ten on a 0-10 scale. Injury/Illness records were reviewed for the previous three years. This review revealed that there had been nine OSHA recordable MSDs over this period. Seven of the nine were injuries to the lower back; in addition there was one shoulder and one elbow case reported. Discuss the Ergonomic principal and risk factors and submitted the Ergonomic Controls Implemented at workplace to improve the efficiency of workers.	05 CO 1 CO 3
Q 2	Critical note on . QA- Carpal Tunnel Syndrome (CTS) QB- Vibration hazard at workplace	05 CO 2
Q3	Why do we need of effective transfer and collection system for hospital wastes? And how poor waste collection system impact on environment and society health. Submit your technical understanding for effective hospital waste management (only flow diagram).	05 CO 2
Q4	QA- Do our country policies align with occupational health and safety, and employment standards concerning psychological health and safety of worker health. QB- The World Health Organization defines a zoonosis as any infection naturally transmissible from vertebrate animals to humans. Justify your answer with suitable example.	05 CO 1 CO 2

Q.5	Describe the field of toxicology and its application when assessing health effects associated with toxic agents commonly found at hazardous waste sites.	05 CO 4
Q 6	Identify the entry routes for TCDD and MIC into living organisms and write the control/ excretion methods for the TCDD and MIC chemicals.	05 CO 1 & 4