



# PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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## End - Term Examinations – May 2025

Date: 24 / 05 / 2025

Time: 09:30am – 12:30pm

School: SOCSE	Program: B. Tech- CAI\CBC\CBD\CCS\CDV\CIT\COM\CSD\CSE\CSG\ISE\IST	
Course Code :CIV2002	Course Name: Occupational Health and Safety	
Semester: VI	Max Marks: 100	Weightage: 50%

CO – Levels	C01	C02	C03	C04	C05
Marks	14	50	36	-	-

### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

### Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	Name any four occupational hazards.	2 Marks	L1	C01
2.	What is physical hazard?	2 Marks	L1	C01
3.	Name any one example each for solid and aerosol flammable chemicals.	2 Marks	L1	C02
4.	Define occupational psychology.	2 Marks	L1	C02
5.	What are stress and strain?	2 Marks	L1	C02
6.	What is WMSD? Give an example	2 Marks	L1	C02
7.	Define biomechanics.	2 Marks	L1	C02
8.	Which are sources of Radon-222 as indoor air pollutant?	2 Marks	L1	C03
9.	What is forced ventilation?	2 Marks	L1	C03
10.	Define HAZOP.	2 Marks	L1	C03

## Part B

### Answer the Questions.

**Total Marks 80M**

<b>11.</b>	<b>a.</b>	Occupational health deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. Explain the key components of the occupational health and safety.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
<b>Or</b>					
<b>12.</b>	<b>a.</b>	An unintended accident is inevitable in a workplace hence Reporting an accident is one of the most important workplace safety tip. Extrapolate the steps that you would follow to report an accident at your work place and how you would make your work place safe?	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
<b>13.</b>	<b>a.</b>	Chemical hazards are substances that can cause harm to human health or the environment. They can be solids, liquids, or gases. Explain the types of chemical hazard with examples and their adverse health effects on exposure.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>Or</b>					
<b>14.</b>	<b>a.</b>	The oxidizer, reactive and corrosive chemicals can cause burn, catch fire or destroy the human tissue. Explain the safe handling and storage of these chemicals with examples.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>15.</b>	<b>a.</b>	Mechanical hazards are dangers arising from machinery or mechanical processes at workplace. Discuss the common mechanical injuries at workplace and safeguarding from mechanical hazards.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>Or</b>					
<b>16.</b>	<b>a.</b>	Ergonomics is the science of fitting a workplace to the user's needs. Explain briefly the advantages and disadvantage of ergonomics. (C.O.No.1) [Comprehension]	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>17.</b>	<b>a.</b>	Employers must protect employees by providing personal protection equipments (PPE). Classify the types of goggle and respirators used at workplace with brief explanation.	<b>10 Marks</b>	<b>L3</b>	<b>CO 3</b>
<b>Or</b>					
<b>18.</b>	<b>a.</b>	Fire accidents can occur from faulty wiring, defective products, and discarded cigarettes left on flammable materials. Choose the suitable fire extinguishers for different classes of fire.	<b>10 Marks</b>	<b>L3</b>	<b>CO 3</b>
<b>19.</b>	<b>a.</b>	Biological hazards are disease producing agents (pathogens) that can be transmitted to individuals through various routes of exposure at occupational environment. Illustrate the controls to biological hazards.	<b>20 Marks</b>	<b>L3</b>	<b>CO 2</b>
<b>Or</b>					

<b>20.</b>	<b>a.</b>	Hazard may be realized or unrealized in workplace. Apply any four appropriate hazard analysis methods to analyse workplace hazards.	<b>20 Marks</b>	<b>L3</b>	<b>CO 2</b>
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<b>21.</b>	<b>a.</b>	The EPA uses a four-level system to classify Personal Protective Equipment Illustrate the EPA's levels of PPE and the responsibilities of the employer, required to pay for PPE to comply with OSHA standards.	<b>20 Marks</b>	<b>L3</b>	<b>CO 3</b>
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**Or**

<b>22.</b>	<b>a.</b>	Good design and the use of safety equipment will not prevent physical injuries in sewerage works, unless safety practices are understood by the entire EHS crew and are enforced. Illustrate the use of forced ventilation and the onsite procedure to follow for confined spaces in maintenance of STP with safety signs.	<b>20 Marks</b>	<b>L3</b>	<b>CO 3</b>
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