18CV653

# Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025 Occupational Health and Safety

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

## Module-1

1	a.	Define occupational health and sa	fety. List the various	objectives of OH & S.	(10 Marks)

b. What is Safety? Explain the history of safety development. (10 Marks)

#### OR

- 2 a. Explain the Domino's theory of accident causation. (08 Marks)
  - b. Write a short notes on 3 E's of safety. (06 Marks)
  - c. List the various reasons for accident investigation. (06 Marks)

## Module-2

- 3 a. Define Ergonomics. List the advantages of Ergonomics. (08 Marks)
  - b. Discuss the elements of OSHA's Ergonomic Guidelines. (06 Marks)
  - c. Discuss the hazard preventation and control methods. (06 Marks)

#### OR

- 4 a. Explain: i) Human Error Analysis ii) Fault Tree Analysis. (10 Marks)
  - b. Explain Emergency Response plan. List the different steps to create it. (10 Marks)

#### Module-3

- 5 a. Define Fire. Discuss the classification of fire. (08 Marks)
  - b. List the general tips we should follow during fire. (08 Marks)
  - c. Explain briefly the fire Triangle. (04 Marks)

#### OR

- 6 a. What is Fire Extinguisher? Discuss briefly the different types of Fire Extinguisher. (08 Marks)
  - b. Discuss the management of Electrical safety. (06 Marks)
  - c. Summerize the technical requirement of product safety programme. (06 Marks)

#### Module-4

7 a. What is Personal Protective Equipment (PPE). List the different types and advantages of PPE's. (10 Marks)

b. Suggest the safety measures adopted to control the risk of occupational health. (10 Marks)

## OR

- 8 a. Discuss the Environment Management Plan (EMP) for safety and sustainability. (10 Marks)
  - b. Write the classification of repeated strain injury and types of disorder associated with it.

    (10 Marks)

# Module-5

- 9 a. Explain the health and safety aspects to be considered in waste water treatment plants.
  (10 Marks)
  - b. Discuss the roles and responsibilities of workers and managers in construction industry.

    (10 Marks)

# **OR**

- 10 a. Discuss briefly the safety and health in
  - i) Cement manufacturing plants

(07 Marks)

ii) RMC plants

(07 Marks)

b. Discuss the handling of chemical in laboratories.

(06 Marks)

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