

GBCS SCHEME

USN

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

18PC821

Eighth Semester B.E. Degree Examination, July/August 2022 Risk Assessment and Safety Engineering

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Define safety. Name and explain on classification of hazards. (10 Marks)
b. Write a note on hazards from steam. (10 Marks)

OR

- 2 a. What is an example of a hazardous identification system? Explain. (12 Marks)
b. Write a note on Hazan and Hazop. (08 Marks)

Module-2

- 3 a. Explain briefly on risk ranking. (15 Marks)
b. Write a note on safety of pumping systems. (05 Marks)

OR

- 4 a. Write a note on batch and continuous reactor. (10 Marks)
b. Explain : i) Distillation process ii) Extraction process. (10 Marks)

Module-3

- 5 a. Explain the main effects of explosion and reason causes of explosions. (15 Marks)
b. Write a note on flash fire and pool fire. (05 Marks)

OR

- 6 a. Explain explosion due to TNT model. (06 Marks)
b. Explain radiation intensity calculations and its effect on plant, people and property. (14 Marks)

Module-4

- 7 a. Discuss important factors of plant layout as safety aspects. (10 Marks)
b. Explain safety provisions in the Factor Act 1948. (10 Marks)

OR

- 8 a. Discuss on advantages of adopting safety laws. (10 Marks)
b. List and explain safety measures in handling and storage of chemicals. (10 Marks)

Module-5

- 9 Write a note on :
a. Risk management
b. Risk reduction
c. Risk sharing
d. Risk retention. (20 Marks)

OR

- 10 a. Explain development of the ISO 14000 series. (10 Marks)
b. Explain the conditions that often require first aid. (10 Marks)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.