

# Question Paper

Exam Date & Time: 12-Jun-2023 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

### Hazards and Safety Management [PQA-MQA201T -S2]

Marks: 75

Duration: 180 mins.

#### SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) Classify flares based on the method of enhancing mixing at the flare tip. Explain each type briefly. (10)
- 2) Explain the reasons for large-scale depletion of forests. (10)
- 3) Explain the application of air handling system in a pharmaceutical industry. (10)
- 4) Write the applications of the following in controlling chemical hazards. i) Green chemistry concept ii) Replacing toxic solvents with less toxic solvents iii) Microwave synthesis iv) Sonochemistry. (10)
- 5) a) Explain the risk management tools in brief. (10)  
b) Explain the sources of waste in a pharma industry in brief. (5+5 marks)

#### SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

- 6) A new bulk drug manufacturing unit is being built. Suggest fire proofing systems for the same. (5)
- 7) List the environmental damage caused by mining activities. (5)
- 8) Analyse the sources of air pollutants and their effect on human beings. (5)
- 9) Write the rules for choosing safer solvents. (5)
- 10) Comment on the statement "To be effective any health and safety programmes needs meaningful participation of workers and their representatives" (5)

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