

Exam Date & Time: 29-Mar-2021 (01:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Quality Control and Quality Assurance [PQA-MQA103T - S2]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) What are the possible contaminants likely to be present in the pharmaceutical manufacturing facility? How to control them? (10)
- 2) Classify the residual solvents used in the manufacturing of pharmaceutical substances and products with appropriate examples. Further, discuss the various options to describe the limits of residual solvents. (10)
- 3) Enlist the elements of Batch Manufacturing Records (BMR). Prepare a dummy format of BMR. (10)
- 4) How IPQC tests are different from QC tests? Enlist and explain the IPQC tests for immediate release tablets. (10)
- 5) Categorize pharmaceutical waste. Discuss in detail the methods of waste disposal. (10)

SECTION - B

Answer all the questions.

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

- 6) Discuss the statistical methods to device sampling plan for raw materials (5)
- 7) How the record of distribution of pharmaceutical products is kept? Write the significance of distribution records. (5)
- 8) Enlist the criteria to qualify as regulated and non- regulated market. (5)
- 9) Pfizer is planning to launch and new drug product in two formulations with multiple strength as shown below:
Capsules: 50mg, 150mg, 250mg
Syrup: 50ml, 150ml, 250ml
Mention the studies to be performed and submitted to the regulatory authorities to establish the stability of the drug product. (5)
- 10) Prepare a protocol for conducting non- clinical testing to be submitted to Institutional Ethical Committee for establishing the bioequivalence of an antipyretic drug. (5)

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