

# Question Paper

Exam Date & Time: 29-Nov-2023 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

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

### Modern Pharmaceutics [PCE-MPH103T - S2]

Marks: 75

Duration: 180 mins.

#### SECTION - A

Answer all the questions.

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

- 1) Explain any 3 analytical tools for compatibility assessment of drug and excipient. (10)
- 2) Explain the steps in sales forecasting in brief. Enlist the factors both internal & external affecting sales forecasts and explain any 4. (10)
- 3) Explain force distribution during tablet compression. Explain compaction profile with the help of a graph. (10)
- 4) Explain the concepts of prospective validation, concurrent validation, retrospective validation and revalidation in pharmaceutical manufacturing of drug products. (10)
- 5) Discuss the details of optimization of pharmaceutical formulations using simplex method. (10)

#### SECTION - B

Answer all the questions.

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

- 6) Explain two evaluation tests for parenterals. (5)
- 7) What is production, planning & control? Enlist the steps involved in PPC. (5)
- 8) Discuss model independent approach for the comparison of dissolution profiles using difference and similarity factors. (5)
- 9) Explain model dependent approach for the comparison of dissolution profiles using Korsmeyer Peppas kinetic model. (5)
- 10) Discuss equipment qualification using DQ, IQ, OQ and PQ. (5)

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