

Exam Date & Time: 09-Mar-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Pharmaceutical Formulation Development [PCE-MIP102T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Discuss on types of stability studies to be performed during pre-formulation stages of formulation development. (10)
- 2) Explain hydrotropic solubilisation technique. (10)
- 3) Describe Zero order and Korsmeyer-Peppas dissolution models. (10)
- 4) Discuss in detail on pH and Tonicity considerations while selecting suitable excipients for developing stable sterile formulations. Give examples. (10)
- 5) Explain stability studies of a new formulation as per ICH guidelines. (10)

SECTION - B

Answer all the questions.

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

- 6) Briefly discuss on study on partition coefficient during Pre-formulation period. (5)
- 7) Write on cyclodextrin complexes in solubility enhancement. (5)
- 8) Briefly write about any two levels of IVIVC correlation. (5)

9) What is the importance of stability study? Briefly explain with examples. (5)

10) What is a significant change during stability study? Give examples. (5)

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