

Exam Date & Time: 03-Dec-2018 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Specialization: Pharmaceutics

DATE: 03-12-2018

Drug Delivery Systems [PCE-MPH102T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Explain the mechanism of mucoadhesion. How are mucoadhesive drug delivery systems evaluated? (10)
- 2) Discuss the physicochemical and biological approaches for SR/CR formulations (10)
- 3) Write a note on the various types of intra uterine devices (IUDs) (10)
- 4) Discuss the barriers for protein peptide delivery. What are the parameters to be considered for selection of suitable drug delivery system for protein delivery? (5+5) (10)
- 5) Explain the principle of Osmotic tablets. Classify Osmotic pumps and describe any ONE Oral Osmotic pump. (10)

SECTION - B

Answer all the questions.

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

- 6) Write about the altered density dosage forms for modulation of GI transit time (5)
- 7) Mention different types of Ocular inserts. Add a note on any ONE type of Ocular insert. (5)
- 8) What are different types of Transdermal drug delivery systems and explain any ONE type. (5)
- 9) Write the principle of ion exchange resin based systems for oral controlled drug delivery. (5)
- 10) Add a note on Permeation Enhancers used in Transdermal Systems (5)

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Exam Date & Time: 07-Dec-2018 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Specialization: Pharmaceutics

Date: 07-12-2018

Modern Pharmaceutics [PCE-MPH103T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Explain DSC, FTIR and XRD in regard to drug-excipient compatibility studies (10)
- 2) Define emulsion. Classify emulsion. Enlist various tests to identify emulsion. Explain any one (10)
- 3) Explain ABC and EOQ methods of Inventory control (10)
- 4) Explain korsmeyer-peppas and higuchi models to analyze the drug release kinetics from controlled drug delivery systems. (10)
- 5) Discuss different types of validation. (10)

SECTION - B

Answer all the questions.

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

- 6) Explain WFI, SWFI (5)
- 7) Describe the effects of friction during tablet compression (5)
- 8) What are the various optimization parameters? (5)
- 9) How to avoid the worst response in the simplex method of optimization. (5)
- 10) Discuss the model independent approach to compare dissolution profiles. (5)

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