



UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
THIRD YEAR FIRST SEMESTER EXAMINATION – FEBRUARY 2017
PHACE 3134 PHARMACEUTICS IV – PAPER II

Date: 28.02.2017

Time: 02 Hours

ANSWER ALL EIGHT QUESTIONS.

1.
 - 1.1 List the methods used in the manufacturing tablets. (15 marks)
 - 1.2 Mention the advantages and disadvantages of the methods mentioned in 1.1 (60 marks)
 - 1.3 Explain the reasons for the addition of different excipients in tablet formulations. (25 marks)

2.
 - 2.1 List the different coating materials used in the film coating of tablets. (20 marks)
 - 2.2 Explain the role of above mentioned coating materials in the film coating of tablets with examples. (30 marks)
 - 2.3 List the film defects that occur in the film coated tablets. (20 marks)
 - 2.4 Briefly explain the importance of water content in the shell of hard gelatin capsules. (30 marks)

3.
 - 3.1 Enumerate the pharmaceutical uses of microencapsulation. (20 marks)
 - 3.2 Briefly describe the spray drying and spray congealing methods in the preparation of microencapsules. (50 marks)
 - 3.3 Describe the different types of softgel filling matrices. (30 marks)

4. Describe the
 - 4.1 formulation additives used in the parenteral formulations. (60 marks)
 - 4.2 different types of contact lens care products. (40 marks)

5. Write notes on
 - 5.1 procedures followed by personnel involved in the sterile parenteral production. (60 marks)
 - 5.2 pyrogen test for parenteral solutions. (40 marks)

6. Describe the
 - 6.1 different types of propellants in the aerosol preparations. (50 marks)
 - 6.2 formulation approaches used in the long acting insulins. (50 marks)

7.

7.1 Define following.

7.1.1 Targeted drug delivery.

(10 marks)

7.1.2 Sustained drug delivery.

(10 marks)

7.2 Discuss the biological factors that influence the design and performance of controlled drug delivery systems.

(80 marks)

8. Write an account on

8.1 components of osmotic pumps.

(30 marks)

8.2 permeation enhancers used in the transdermal patches.

(30 marks)

8.3 structural features of liposomes.

(40 marks)

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