

UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
THIRD YEAR FIRST SEMESTER EXAMINATION – SEPTEMBER 2018
PHACE 3134 PHARMACEUTICS IV – PAPER II

Date: 27.09.2018

Time: 02 Hours

Answer All Eight Questions.

- 1.**
 - 1.1 Briefly explain the importance of granulation in the tablet manufacturing. (20 marks)
 - 1.2 List the different types of tablet excipients with one example for each of them. (20 marks)
 - 1.3 Explain functions of excipients that are mentioned in 1.2. (60 marks)

- 2.**
 - 2.1 Explain the reasons for following tablet manufacturing defects.
 - 2.1.1 Chipping (30 marks)
 - 2.1.2 Capping and Lamination (40 marks)
 - 2.2 Explain the importance of using wetting agents in the hard gelatin capsules. (30 marks)

- 3.**
 - 3.1 Briefly explain the different methods that are used to induce coacervation in the preparation of microencapsules. (75 marks)
 - 3.2 List the advantages of softgel formulations. (25 marks)

- 4.**
 - 4.1 Explain the role of following in the ophthalmic solutions.
 - 4.1.1 Tonicity adjusting agents (20 marks)
 - 4.1.2 Viscosity imparting agents (20 marks)
 - 4.2 Write an account on sustained delivery of insulin injections. (60 marks)

- 5.**
 - 5.1 Write an account on “Air Control System” of the sterile pharmaceutical manufacturing area. (60 marks)
 - 5.2 Explain the different types of protectants that are used in the parenteral formulations. (40 marks)

- 6.** Explain the
 - 6.1 different types of deposition mechanisms of aerosolised particles in the respiratory tract. (60 marks)
 - 6.2 nomenclature of propellants. (40 marks)

7.

7.1 Define the following.

7.1.1 Delayed release dosage forms (10 marks)

7.1.2 Controlled release dosage forms (10 marks)

7.2 List the advantages of oral controlled released dosage forms. (40 marks)

7.3 Enumerate the properties of drugs that are required for transdermal delivery. (40 marks)

8. Write an account on

8.1 ligand mediated targeting. (30 marks)

8.2 osmotic drug delivery system. (40 marks)

8.3 colon targeted drug delivery. (30 marks)

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