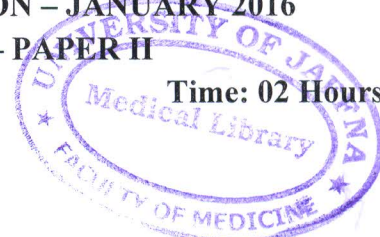


UNIVERSITY OF JAFFNA
BACHELOR OF PHARMACY
THIRD YEAR FIRST SEMESTER EXAMINATION – JANUARY 2016
PHACH 3102 PHARMACEUTICS IV – PAPER II

Date: 19.02.2016.

Time: 02 Hours

ANSWER ALL EIGHT QUESTIONS.



1. Briefly describe
 - 1.1 the importance of granulation in tablet manufacturing. (30 Marks)
 - 1.2 various granulation mechanisms involved in the formation of granules. (70 Marks)

2.
 - 2.1 Explain the manufacturing defects of tablets. (40 Marks)
 - 2.2 Describe the measures to be taken to overcome the above mentioned defects during tablet production. (20 Marks)
 - 2.3 Write an account on disintegrants used in tablet formulations. (40 Marks)

3.
 - 3.1 List the properties of hard gelatine capsule shells. (30 Marks)
 - 3.2 Describe the formulation of fill materials for soft gels. (70 Marks)

4.
 - 4.1 Define “microencapsulation”. (10 Marks)
 - 4.2 List the pharmaceutical applications of microencapsulation. (30 Marks)
 - 4.3 Briefly explain the spray drying and spray congealing methods in the preparation of microencapsules. (40 Marks)
 - 4.4 List the evaluation parameters of microencapsules. (20 Marks)

5.
 - 5.1 Describe the procedures to be followed by personnels working in sterile production area. (40 Marks)
 - 5.2 Briefly describe the general characteristics of ophthalmic solutions. (30 Marks)
 - 5.3 Write a note on preservatives used in ophthalmic preparations. (30 Marks)

6.
 - 6.1 Define “pharmaceutical aerosols”. (10 Marks)
 - 6.2 List the deposition mechanisms of aerosol particles in the airways. (20 Marks)
 - 6.3 Explain how environmental humidity influences on particle size of inhaled aerosol. (20 Marks)
 - 6.4 Briefly explain the evaluation parameters of metered dose inhalers. (50 Marks)

7. 7.1 What is "Targeted Drug Delivery System"? (10 Marks)
7.2 Explain the mechanism of azo drugs in targeting colonic site. (30 Marks)
7.3 Describe the morphological features of liposomes. (40 Marks)
7.4 List the five pharmaceutical carriers other than liposomes used in targeted drug delivery system. (20 Marks)
8. 8.1 List the factors that influence the design and performance of control drug delivery systems. (30 Marks)
8.2 Describe the formulation approaches in the development of long acting insulin injections. (40 Marks)
8.3 Explain the role of permeability enhancers used in the transdermal drug delivery. (30 Marks)

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