

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
THIRD YEAR SECOND SEMESTER EXAMINATION IN BPharmHons. -2023
PHAPT 3214 PHARMACEUTICAL TECHNOLOGY II

Date: 19.05.2025

Answer all Six questions

Answer Part A & Part B in separate answer books

Time: 03 Hours



Part A

1.
 - 1.1 Define Targeted drug delivery system. (10 Marks)
 - 1.2 List the types of carriers used in Targeted drug delivery system. (20 Marks)
 - 1.3 Mention three (03) types of lipid-based nanoparticles. (15 Marks)
 - 1.4 Write a brief account on the different types of lipid-based nanoparticles mentioned in 1.3 (55 Marks)

2.
 - 2.1 Define the following.
 - 2.1.1 Controlled release dosage forms (10 Marks)
 - 2.1.2 Sustained release dosage forms (10 Marks)
 - 2.1.3 Extended-release dosage forms (15 Marks)
 - 2.1.4 Prolonged release dosage forms (15 Marks)
 - 2.2 Discuss the factors influencing the designing of the modified release dosage forms. (50 Marks)

3.
 - 3.1 Differentiate suspension from solution. (40 Marks)
 - 3.2 Explain the importance of pH in liquid dosage forms. (30 Marks)
 - 3.3 Discuss the effect of particle size on the stability of the suspension. (30 Marks)

4.
 - 4.1 List the formulation additives used in the parenteral solution. (20 Marks)
 - 4.2 Briefly explain how following tests performed for parenteral dosage forms.
 - 4.2.1 Sterility test (30 Marks)
 - 4.2.2 Pyrogen tests (20 Marks)
 - 4.3 Briefly explain on the preparation method of ophthalmic ointments. (30 Marks)

PART B

- 5. 5.1 State two (02) uses of multiple compressed tablets. (10 Marks)
- 5.2 Name two (02) polymers used for enteric coating of tablets. (10 Marks)
- 5.3 5.3.1 List the steps involved in the wet granulation method. (20 Marks)
- 5.3.2 Discuss the advantages and disadvantages of the wet granulation method. (40 Marks)
- 5.4 Briefly describe the roller compaction method used in dry granulation method. (20 Marks)

- 6. 6.1 6.1.1 List the steps involved in capsule shell preparation. (10 Marks)
- 6.1.2 Briefly describe the steps mentioned in 6.1.1. (30 Marks)
- 6.2 Briefly explain
- 6.2.1 why wetting agents are used in capsule shell preparation. (30 Marks)
- 6.2.2 different capsule sealing methods. (30 Marks)