

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
FIRST YEAR SECOND SEMESTER EXAMINATION IN BPharmHons – 2020
PHACE 1254 PHYSICAL PHARMACEUTICS – PAPER II

Date: 15.08.2022

Time: 03 Hours

Answer All Six Questions

1.
 - 1.1 What do you mean by Dissolution of oral solid dosage forms? (10 Marks)
 - 1.2 Briefly describe the factors that affect the dissolution of solid particles. (40 Marks)
 - 1.3 Explain how dissolution test is conducted using dissolution apparatus. (50 Marks)

2.
 - 2.1 What is pharmaceutical dispersion? (10 Marks)
 - 2.2 List the different types of pharmaceutical dispersions. (15 Marks)
 - 2.3 Compare the different types of pharmaceutical dispersions mentioned in 2.2. (20 Marks)
 - 2.4 Discuss the electric double layer of colloidal particles. (55 Marks)

3.
 - 3.1 Discuss how suspensions prepared with optimum stability convenient usage. (45 marks)
 - 3.2
 - 3.2.1 Briefly explain the different instabilities of emulsion. (30 marks)
 - 3.2.2 Explain how instabilities of emulsion mentioned in 3.2.1 can be avoided. (25 Marks)

4.
 - 4.1 What are Non-Newtonian systems? (05 Marks)
 - 4.2 Classify and describe the types of Non-Newtonian systems with the help of rheograms. (70 Marks)
 - 4.3 Briefly explain the pharmaceutical applications of surfactants. (25 Marks)

5.
 - 5.1 Discuss packing arrangements of powder. (40 Marks)
 - 5.2 Describe the accelerated stability study of drugs. (60 Marks)

6. Write an account on the following.
 - 6.1 Pharmaceutical applications of complexes (30 Marks)
 - 6.2 Photolysis of drugs (30 Marks)
 - 6.3 Micellar solubilization (40 Marks)