

UNIVERSITY OF JAFFNA, SRILANKA
BACHELOR OF PHARMACY
THIRD YEAR FIRST SEMESTER EXAMINATION (Old syllabus) – July 2013
PHACE 3102 PHARMACEUTICS III - PAPER II

Date: 21.10.2013

Time: 02 Hours

ANSWER ALL EIGHT QUESTIONS.

1.
 - 1.1 Explain the factors that affect dissolution rate of drugs. (60 marks)
 - 1.2 Write note on steady state diffusion. (40 marks)
2.
 - 2.1 What is a colloid? (10 marks)
 - 2.2 Describe the different types of colloids. (60 marks)
 - 2.3 List the applications of colloids in pharmaceutical products? (30 marks)
3.
 - 3.1 List the properties of a suspension. (20 marks)
 - 3.2 Briefly explain the role of interfacial properties in the stability of suspension. (80 marks)
4. Briefly describe the
 - 4.1 different types of non Newtonian system with the help of graphs. (60 marks)
 - 4.2 mechanism of thixotropy. (40 marks)
5.
 - 5.1 List the pharmaceutical application of interfacial phenomena. (20 marks)
 - 5.2 Describe how the surface tension of a liquid can be measured by Dunuoytensiometer? (40marks)
 - 5.3 List the pharmaceutical applications of surfactants. (40marks)
6.
 - 6.1 List the factors influencing the cohesion of powders? (15 marks)
 - 6.2 How cohesion of powder can be determined using Jenike cell? (45 marks)
 - 6.3 How can the flow property of powder be improved? (40 marks)
7.
 - 7.1 Describe the structure and pharmaceutical uses of cyclodextrins. (60 marks)
 - 7.2 Briefly explain the functions of Bentonite in Calamine lotion (40 marks)
8. Write an account on
 - 8.1 prevention of oxidation of drugs. (30 marks)
 - 8.2 preparation of gels. (40 marks)
 - 8.3 significance of photochemistry in pharmacy. (30 marks)