

UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
FOURTH YEAR SECOND SEMESTER EXAMINATION –Apr 2020
PHAAP 4214 ADVANCED PHARMACEUTICS ~~II~~ – PAPER II

Date: 20.07.2020

Time: 02 Hours

Answer All Six Questions

1. 1.1 Define following terms.
 - 1.1.1 Relative bioavailability (10 Marks)
 - 1.1.2 Pharmaceutical equivalents (10 Marks)
 - 1.1.3 Single source drug products (10 Marks)
- 1.2 Explain the
 - 1.2.1 formulation strategies that can be used to increase the permeability of drugs. (40 Marks)
 - 1.2.2 effect of gastrointestinal pH on oral absorption of drugs (30 Marks)
2. 2.1 What is “Xenobiotics” ? (10 Marks)
- 2.2 List the changes occurring in the property of drug molecules that undergo phase II reactions. (15 Marks)
- 2.3 Briefly describe the
 - 2.3.1 glucuronic acid conjugation of drugs. (45 Marks)
 - 2.3.2 one compartment pharmacokinetic model. (30 Marks)
3. 3.1 List and explain the functions of different formulation additives that are used in hair conditioners. (60 Marks)
- 3.2 Explain how oxidation dyes impart colour to hairs? (40 Marks)
4. 4.1 Define “Preformulation”. (10 Marks)
- 4.2 Briefly explain
 - 4.2.1 the role of thermal analysis in preformulation studies. (30 Marks)
 - 4.2.2 different methods that are used to enhance the stability of drugs against chemical degradation. (60 Marks)
5. 5.1 What is pilot plant scale up technique? (10 Marks)
- 5.2 Discuss the importance of pilot plant scale up technique in the formulation development. (30 Marks)
- 5.3 Describe the different factors that affect the quality of drugs that store in the plastic containers. (60 Marks)

6. 6.1 Define "Pharmaceutical validation". (10 Marks)
- 6.2 List the advantages of conducting pharmaceutical validation. (25 Marks)
- 6.3 Write an account on
- 6.3.1 stress testing of drugs. (35 Marks)
- 6.3.2 salivary excretion of drugs. (30 Marks)