

UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
FOURTH YEAR SECOND SEMESTER EXAMINATION – MARCH 2019
PHAAP 4214 ADVANCED PHARMACEUTICS – PAPER II

Date: 19.03.2019

Time: 02 Hours

Answer all six questions

- 1.**
 - 1.1. Explain the factors that affect the biotransformation of drugs. (40 marks)
 - 1.2. Explain the
 - 1.2.1 conjugation with glucuronic acid. (30 marks)
 - 1.2.2 conjugation with glutathione. (30 marks)

- 2.**
 - 2.1. Briefly explain how depilatories act in different ways. (30 marks)
 - 2.2. Describe the different formulations additives used in
 - 2.2.1. lipstick formulations. (40 marks)
 - 2.2.2. nail lacquers. (30 marks)

- 3.**
 - 3.1. Describe the properties of different types of plastics that are used in the packaging of pharmaceuticals. (40 marks)
 - 3.2. Explain the role of antioxidants in the protection of pharmaceuticals? (40 marks)
 - 3.3. Describe the significance of hygroscopicity test in the preformulation studies. (20 marks)

- 4.**
 - 4.1. Describe the direct methods that are used to determine the bioavailability of drugs. (40 marks)
 - 4.2. Explain the different steps involved in the pilot plant scale up techniques. (60 marks)

- 5.**
 - 5.1. Write the importance of stress testing of active pharmaceuticals. (20 marks)
 - 5.2. Describe the good manufacturing practice (GMP) for the following in pharmaceutical industry.
 - 5.2.1 Personal hygiene (20 marks)
 - 5.2.2 Premises (60 marks)

- 6.** Write an account on
 - 6.1. non linear pharmacokinetics. (40 marks)
 - 6.2. salivary excretion of drugs. (30 marks)
 - 6.3. retrospective validation. (30 marks)