

**UNIVERSITY OF JAFFNA  
BACHELOR OF PHARMACY**

**FOURTH YEAR SECOND SEMESTER EXAMINATION — JULY 2015**

**PHAAP 4201 ADVANCED PHARMACEUTICS — PAPER II**

**Date: 07.07.2015.**

**Time: 02 Hours**

**ANSWER TO ALL SIX QUESTIONS**

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1.
  - 1.1 Briefly describe the pH partition theory for the transport of drugs across biological membrane. (50 Marks)
  - 1.2 Write a note on pilot pharmaceutical plant scale up technique. (50 Marks)
2.
  - 2.1 What are the storage conditions for various durations for the stability studies of drugs according to ICH guidelines? (30 Marks)
  - 2.2 Explain how bioavailability of drugs are affected by
    - 2.2.1. presystemic metabolism. (30 Marks)
    - 2.2.2. excipients present in the dosage form (40 Marks)
3.
  - 3.1 What is mixed function oxidase? (10 Marks)
  - 3.2 Give five examples for the oxidative metabolism of drugs. (30 Marks)
  - 3.3 Explain the role of chemical factors in the biotransformation of drugs. (60 Marks)
4.
  - 4.1 Write an account on common ingredients used in the face powder. (50 Marks)
  - 4.2 moisturizer. (50 Marks)
5.
  - 5.1 Describe the importance of solubility analysis in the preformulation studies. (40 Marks)
  - 5.2 Explain the role of lubricants in the tablet formulations. (40 Marks)
  - 5.3 List five materials used as plastic packaging. (20 Marks)
6.
  - 6.1 Briefly describe the degradation of drugs by oxidation and hydrolysis during storage with examples. (70 Marks)
  - 6.2 List the degradation pathways of drugs during storage other than oxidation and hydrolysis. (30 Marks)