

*Allied Health Sciences*

UNIVERSITY OF JAFFNA, SRI LANKA  
FACULTY OF ALLIED HEALTH SCIENCES  
SECOND YEAR SECOND SEMESTER EXAMINATION IN BPharm(Hons) – 2020  
PHACE 2234 PHARMACEUTICS III – PAPER II

Date: 08.11.2022

Time: 02 Hours

Answer All Eight Questions.

1.
  - 1.1. Briefly explain “Biopharmaceutical Classification System”. (45 Marks)
  - 1.2. Discuss how following factors affect the dissolution of drugs.
    - 1.2.1. Common ion effect (20 Marks)
    - 1.2.2. Surfactants (35 Marks)
2.
  - 2.1. Define and classify colloids. (25 Marks)
  - 2.2. Briefly describe the stages of primary and secondary minimums in colloids. (30 Marks)
  - 2.3. List the pharmaceutical applications of colloids. (45 Marks)
3.
  - 3.1. List the desirable properties of oral suspension. (25 Marks)
  - 3.2. Write the merits and demerits of following suspensions.
    - 3.2.1. Flocculated suspension (20 Marks)
    - 3.2.2. Deflocculated suspension (25 Marks)
    - 3.2.3. List three (03) types of flocculating agents used in suspensions. (30 Marks)  
Give one example for each type.
4.
  - 4.1. What is shear thinning system? (10 Marks)
  - 4.2. List the types of shear thinning system. (10 Marks)
  - 4.3. Differentiate the types of shear thinning systems mentioned in 4.2. (20 Marks)
  - 4.4. Briefly explain the mechanisms of shear thinning system mentioned in 4.2. (60 Marks)
5. Describe the pharmaceutical applications of
  - 5.1. surfactants (60 Marks)
  - 5.2. adsorbents (40 Marks)
6.
  - 6.1. Briefly explain the different types of densities of powder. (40 Marks)
  - 6.2. Describe the pH partition principle of drug transport. (60 Marks)
7. Discuss the
  - 7.1. structure and uses of  $\beta$ - cyclodextrins. (55 Marks)
  - 7.2. instabilities of emulsion. (45 Marks)
8. Write a short account on
  - 8.1. packing arrangement of powder. (60 Marks)
  - 8.2. photolysis of drugs. (40 Marks)