



**UNIVERSITY OF JAFFNA, SRI LANKA**  
**FACULTY OF ALLIED HEALTH SCIENCES**  
**FOURTH YEAR FIRST SEMESTER EXAMINATION IN BPharmHons – 2023**  
**PHAPT 4112 PHARMACEUTICAL TECHNOLOGY III**

Date: 02.12.2024

Time: 02 Hours

Answer All Four (04) Questions

1.
  - 1.1 Briefly discuss common characteristics of ingredients used in the face powder. (30 Marks)
  - 1.2 Briefly explain how
    - 1.2.1 sunscreen agents protect the skin from sunlight? (20 Marks)
    - 1.2.2 depilatories remove hair? (20 Marks)
    - 1.2.3 oxidation dyes impart colour to hair? (30 Marks)
  
2.
  - 2.1 Describe the different parameters used to assess the flow property of powder. (20 Marks)
  - 2.2 List the methods used to overcome the cohesiveness of powder formulation. (20 Marks)
  - 2.3 Briefly explain the methods used to prevent photodegradation of drugs. (30 marks)
  - 2.4 Discuss the drug-plastic package interactions. (30 Marks)
  
3.
  - 3.1 Briefly explain five (05) functions of the quality assurance department in the production of pharmaceuticals. (30 Marks)
  - 3.2 Write an account on good manufacturing practices for equipment in pharma industry. (40 Marks)
  - 3.3 Give six (06) Ideal properties of plasma substitutes. (30 Marks)
  
4.
  - 4.1
    - 4.1.1 Explain the difference between the real-time and accelerated stability studies. (15 Marks)
    - 4.1.2 Compare and contrast between the bracketing and matrix methods of stability testing. (25 Marks)
    - 4.1.3 List the factors that affect the stability of a pharmaceutical product. (10 Marks)
  - 4.2
    - 4.2.1 Define a pilot plant. (10 Marks)
    - 4.2.2 Briefly explain the GMP considerations in pilot plant manufacturing. (40 Marks)