



**UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES**

**DEPARTMENT OF PHARMACY**

**SECOND BPHARM PART I EXAMINATION – JANUARY/FEBRUARY 2023**

**PH 2123 PHARMACEUTICS IIB – SEQ PAPER**

**TIME: TWO HOURS**

**INSTRUCTIONS**

- There are **four** questions in **part A and B** in this paper.
- Answer all questions.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

**PART A**

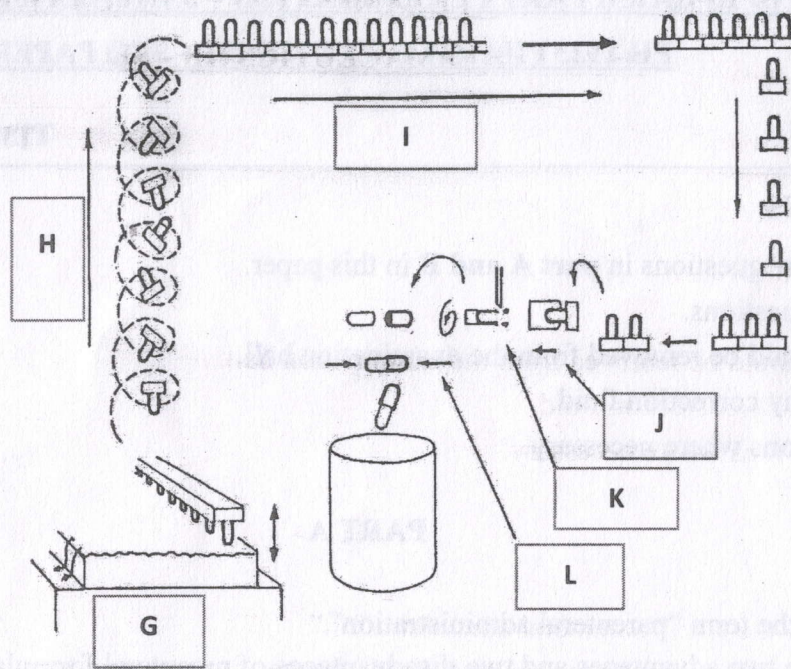
1.
  - 1.1. Define the term “parenteral administration”. (10 marks)
  - 1.2. Mention two advantages and two disadvantages of parenteral formulations. (20 marks)
  - 1.3. Write a short note on aqueous vehicles used for injections. (20 marks)
  - 1.4. Briefly describe about packaging of parenteral products. (20 marks)
  - 1.5. Briefly explain the therapeutic pharmaceutical incompatibility. (20 marks)
  - 1.6. List two other basic types of pharmaceutical incompatibilities. (10 marks)
  
2.
  - 2.1. List two advantages and two disadvantages of the tablet dosage form. (20 marks)
  - 2.2. “Enteric coated tablets have delayed release properties”. Briefly explain. (20 marks)
  - 2.3. Illustrate the procedure for wet granulation process of a tablet using a flow chart. (30 marks)
  - 2.4. Mention two types of tablet coatings. (10 marks)
  - 2.5. Write four reasons for coating a tablet. (20 marks)

**PART B**

3.
  - 3.1. Define the term ‘microencapsulation’. (10 marks)
  - 3.2. Briefly explain the applications of microencapsulation in the pharmaceutical industry. (30 marks)
  - 3.3. Name the classes of excipients suitable to fulfill below requirements in empty hard gelatin capsule production. Give one example for each class of excipient you mentioned. (24 marks)
    - a) Getting the required thickness of the shell
    - b) Maintaining the shape of the capsules
    - c) To prevent the shell from microbial contamination
    - d) Colored soft gelatin capsules

3.4. Briefly explain the main steps (G-L) involved in making empty hard gelatin capsules.

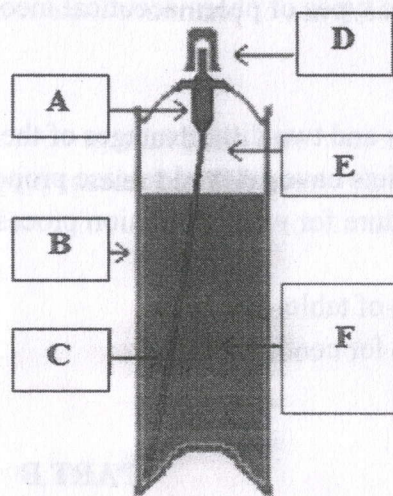
(36 marks)



4.

4.1. Name A-F components of the below schematic diagram.

(24 marks)



4.2. Provide two labeling information that should be on the primary container of a “flammable” or “extremely flammable” aerosol container. (16 marks)

4.3. Write short notes on the following topics.

4.3.1. Use of plasma as a blood product (20 marks)

4.3.2. Characteristics of drugs unsuitable for sustained release dosage form (20 marks)

4.3.3. Advantages of sub-dermal contraceptive implants (20 marks)

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