



UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES

DEPARTMENT OF PHARMACY

SECOND BPHARM PART I EXAMINATION – JANUARY/FEBRUARY 2022

PH 2123 PHARMACEUTICS IIB– SEQ PAPER

TIME: TWO HOURS

INSTRUCTIONS

- There are **two** parts as **Part A** and **Part 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

01.

- 1.1. Define the term “pharmaceutical incompatibility”. **(10 marks)**
- 1.2. Answer the following questions based on below formula for chalk mixture.
- | | |
|-------------------|----------|
| Chalk powder | 2.00 g |
| Tincture catechu | 2.00 g |
| Cinnamon water to | 30.00 ml |
- 1.2.1. Mention the basic type of pharmaceutical incompatibility that you could identify in the above formula. **(05 marks)**
- 1.2.2. List other two basic types of pharmaceutical incompatibilities. **(10 marks)**
- 1.2.3. As a pharmacist, state how you would overcome the pharmaceutical incompatibility problem identified in 1.2.1. in compounding the chalk mixture. **(20 marks)**
- 1.3. Write a short note on “injectable suspensions”. **(20 marks)**
- 1.4. Giving the procedure which is followed, briefly explain the form fill seal technology of parenteral fluids. **(35 marks)**

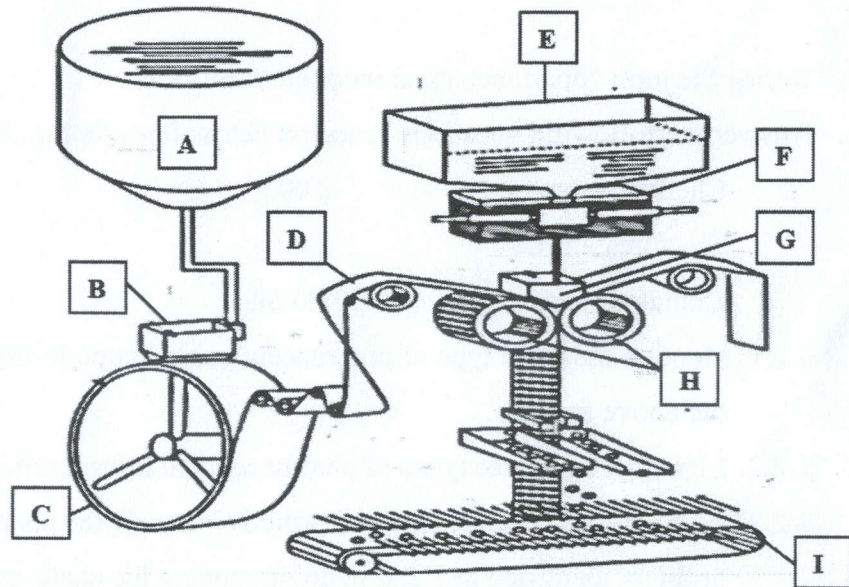
02.

- 2.1. List two types of tablets which are used to prepare solutions. **(10 marks)**
- 2.2. State the three main stages in tablet formulation. **(15 marks)**
- 2.3. Mention two tablet defects which can occur during the manufacturing. **(10 marks)**
- 2.4. Illustrate the procedure for dry granulation process of a tablet using a flow chart. **(30 marks)**
- 2.5. Write a short note on “film coating”. **(35 marks)**

PART B

03.

- 3.1. State two methods follow in manufacturing soft gelatin capsules. **(12 marks)**
- 3.2. Name the classes of excipients best suit to fulfill the requirements given below in capsule formulation. **(20 marks)**
- i. Getting the desired bulk to fill capsules
 - ii. To handle physical incompatibilities of ingredients (act as protective sorbents)
 - iii. To ensure flexibility of the shell
 - iv. To avoid/minimize the growth of microorganism
 - v. To have an elegant appealing to the soft gelatin capsule
 - vi. Reduce the transparency
 - vii. Masking the taste/improving the taste of soft gelatin capsule
- 3.3. Name the equipment shown in the schematic diagram below and identify the parts from A to I. **(28 marks)**



- 3.4 Briefly explain the manufacturing process of soft gelatin capsules using the equipment shown in 3.3. **(40 marks)**

04.

- 4.1. Define the term 'pharmaceutical aerosol'. **(15 marks)**
- 4.2. Draw a schematic diagram of an aerosol container with its valve assembly and identify all the parts. **(25 marks)**
- 4.3. State three methods used in the filling operations of pharmaceutical aerosols. **(15 marks)**
- 4.4. Briefly explain two filling methods mentioned in 4.3. **(45 marks)**

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