



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

**DEPARTMENT OF PHARMACY**

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

**PH 2114 PHARMACEUTICS IIA – SEQ PAPER**

**TIME: THREE HOURS**

**INSTRUCTIONS**

- There are **three** parts as **part A, B and C** 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.

1.1.1. Define 'suppositories' according to the British Pharmacopoeia. (10 marks)

1.1.2. Write two main categories of suppository bases giving one example for each. (10 marks)

1.1.3. Briefly explain the manufacturing process of suppositories. (20 marks)

1.2.

1.2.1. Briefly describe the advantages and disadvantages (three of each) of ophthalmic dosage forms. (30 marks)

1.2.2. Write four formulation considerations of ophthalmic dosage forms. (20 marks)

1.2.3. List four factors which affect the drug absorption through the nasal route. (10 marks)

2.

2.1. Define the terms 'Menstruum' and 'Marc' related to extraction of medicinally active ingredients from natural products. (10 marks)

2.2. Briefly explain the main steps involved in general method of preparing Galenicals. (25 marks)

2.3. List three methods use to prepare aromatic waters. (15 marks)

**PART B**

2.4. List two factors which affect for percutaneous absorption. (10 marks)

2.5. Give one advantage and one disadvantage of transdermal drug delivery systems. (10 marks)

2.6. Describe the procedure for preparation of a pharmaceutical cream in a manufacturing firm. (30 marks)

3.

3.1. Answer following regarding monophasic liquid dosage forms.

3.1.1. State two advantages and two disadvantages. (20 marks)

3.1.2. List two types of monophasic liquid dosage forms that could be instilled into body cavities. (10 marks)

3.2. Write short notes on following.

3.2.1. Elixirs (25 marks)

3.2.2. Difference between a lotion and a liniment (20 marks)

3.2.3. Gargles (25 marks)

4.

4.1. Define the term "surgical aid". (10 marks)

4.2. List four features of ideal surgical dressings. (20 marks)

4.3. Classify the surgical dressings. (20 marks)

4.4. List two non-absorbable synthetic sutures. (10 marks)

4.5. Explain the manufacturing process of surgical cat gut. (40 marks)

### PART C

5.

5.1. "Particle size reduction and sieving are two main steps in pharmaceutical powder preparation."

5.1.1. List four equipment use in large scale particle size reduction process. (10 marks)

5.1.2. Briefly describe "pulverization by intervention". (15 marks)

5.1.3. State the equipment uses for the separation of powder particles by size. (10 marks)

5.2. Write a short description on "bulk powders for internal use". (20 marks)

5.3. List four reasons to use granules instead of powders. (20 marks)

5.4. Describe the dry granulation method use in the preparation of granules. (25 marks)

6.

6.1. Write the two types of emulsions when classified based on dispersed phase. (10 marks)

6.2. State three methods use in the preparation of primary emulsions. (15 marks)

6.3. Describe three tests that can be carried out to identify the type of an emulsion. (30 marks)

6.4. Briefly describe "suspensions containing in-diffusible solids". (10 marks)

6.5. List four advantages of pharmaceutical suspensions. (20 marks)

6.6. Wetting agents are added in the preparation of a pharmaceutical suspension. Briefly explain the reason for using them. (15 marks)

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