



UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES

DEPARTMENT OF PHARMACY

SECOND BPHARM PART I EXAMINATION – MARCH/APRIL 2021

PH 2123 PHARMACEUTICS II B - SEQ

TIME: TWO HOURS

INSTRUCTIONS

- There are **four** questions in parts **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

01.

1.1 A formula for quinine hydrochloride mixture given below:

Quinine hydrochloride	0.12 mL
Sodium salicylate	4.00 g
Purified water	100.00 mL

Answer the following.

1.1.1 Mention the basic type of pharmaceutical incompatibility that should be identified prior to the compounding of the above formulation. **(05 marks)**

1.1.2 List two other basic types of pharmaceutical incompatibilities. **(10 marks)**

1.1.3 State the reason for pharmaceutical incompatibility that you have identified in 1.1.1. **(10 marks)**

1.1.4 As a pharmacist, briefly describe how you would overcome the problem identified in 1.1.1. when compounding the quinine hydrochloride mixture ensuring the desired quality. **(30 marks)**

1.2 List three basic routes of parenteral administration. **(15 marks)**

1.3 Briefly describe the term “small volume parenteral” giving examples. **(30 marks)**

02.

2.1 List two types of tablets that are used in oral cavity. **(10 marks)**

2.2 State the reasons for enteric coating of tablets. **(10 marks)**

2.3 Give two examples for enteric coated tablets in pharmacies. **(10 marks)**

2.4 Tablets are one of the major solid dosage forms. List four principles considered in the formulation of tablets. **(20 marks)**

2.5 By means of a flow chart illustrate the procedure for wet granulation process of manufacturing of tablets. **(30 marks)**

2.6 Give two binders and two lubricants used in pharmaceutical industry. **(20 marks)**

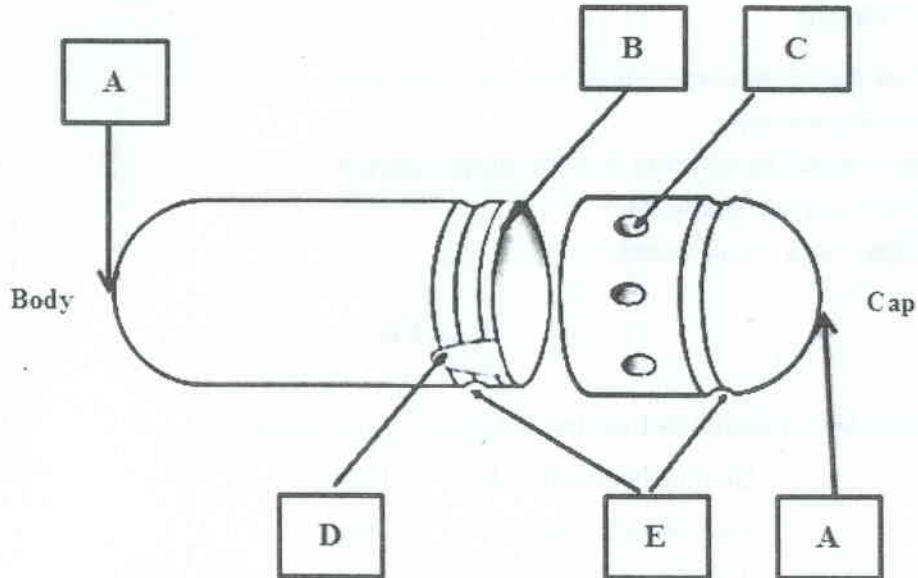
PART B

03.

3.1 The image given below shows a schematic diagram of an empty hard gelatin capsule.

Identify the parts A-E.

(25 marks)



3.2 List four excipients use in the filling of hard gelatin capsules

(10 marks)

3.3 Describe the uses of each excipient you mentioned in 3.2.

(20 marks)

3.4 State two methods used in the manufacture of soft gelatin capsules.

(10 marks)

3.5 Briefly explain one method you mentioned in 3.4.

(35 marks)

04.

4.1 List three main classes of oral care products.

(15 marks)

4.2 Formulation of toothpastes requires a unique blend of several ingredients. State the function/s of each ingredient given below.

(25 marks)

4.2.1 Abrasives

4.2.2 Detergents

4.2.3 Humectants

4.2.4 Binding agents

4.2.5 Preservatives

4.3 Write short notes on the following.

4.3.1 Advantages of sub-dermal contraceptive implants

(20 marks)

4.3.2 The principle of operation of an aerosol

(20 marks)

4.3.3 Limitations of sustained release dosage forms

(20 marks)