

UNIVERSITY OF JAFFNA
BACHELOR OF PHARMACY
SECOND YEAR FIRST SEMESTER EXAMINATION OCTOBER 2019
PHACE 2134 PHARMACEUTICS II

Date: 04.11.2019

Time: 02 Hours

Answer All Eight (08) Questions.

01.

- 1.1 Briefly explain Pharmaceutical uses of 'Alcohol'. (25 Marks)
- 1.2 Explain the following:
- 1.2.1 Alcohol. (10 Marks)
- 1.2.2 Surgical spirit. (10 Marks)
- 1.2.3 Proof spirit. (10 Marks)
- 1.3 Calculate the alcohol content in surgical spirit BP? (25 Marks)
- 1.4 Find the strength of alcoholBP in terms of proof spirit? (20 Marks)

02. A container closure system must be designed to protect the drug during actual conditions of storage, shipment, use and be able to deliver the correct amount of product at the time of use.

- 2.1 What are the factors considered in selection of the container/s for pharmaceutical packaging? (15 Marks)
- 2.2 Describe the properties of the packaging material used for parenteral products? (30 Marks)
- 2.3 Compare 'primary packaging and secondary packaging of (30 Marks)

pharmaceuticals’.

2.4 Write an account on ‘Repackaging’? (25 Marks)

03. Study of drug-excipient compatibility is an important phase in the pre-formulation stage of drug development. The potential interactions between drugs and excipients have effects on the chemical, physical, bioavailability and stability of the dosage form.

3.1 Define the term ‘Pharmaceutical incompatibilities’. (10 Marks)

3.2 List the reasons for the ‘Physical Incompatibilities’ of pharmaceuticals. (10 Marks)

3.3 Write an account on ‘Therapeutical Incompatibilities of pharmaceuticals’. (25 Marks)

3.4 Briefly explain five chemical changes which lead to ‘Chemical Incompatibilities’. (25 Marks)

3.5 Describe the effects of the following:

3.5.1 Caffeine with Amphetamine. (10 Marks)

3.5.2 Warfarin with Vitamin K. (10 Marks)

3.5.3 Alcohol with Sedatives. (10 Marks)

04. Hospital pharmacist provides optimal patient care via effectively preparing the prescriptions and through minimizing medication errors.

4.1 What are the most common medication errors? (10 Marks)

4.2 List ten (10) steps which can be used to prevent medication errors. (25 Marks)

4.3 Briefly explain different methods of pricing the prescription. (30 Marks)

4.4 Write an account on 'labelling in processing the prescription'. (35 Marks)

05. Describe parts of a prescription. (100 Marks)

06. Attention should be given to accurate dosage of medications to avoid the potential source of side-effects and treatment failure.

6.1 Define the following:

6.1.1 Therapeutic dose. (10 Marks)

6.1.2 Dosage regimen. (10 Marks)

6.2 Define the term 'Posology'. (10 Marks)

6.3 Explain the two factors that influence the dose of a drug. (30 Marks)

6.4 Calculate the needed volume to give a child dose 350 mg (30 Marks)
Flucloxacillin IV from a concentration of 500mg in 10mL?

6.5 State two references which can provide the information on 'Drug (10 Marks)
use and dose'.

07. Describe the preparations of the following:

7.1 Five powder packets each containing 0.25 micro gram digoxin. (40 Marks)

7.2 Hundred milliliter (100 ml) of 57.77 OP from Absolute Alcohol. (30 Marks)

7.3 Sixty gram (60g) of 9% salicylic acid using 3% and 15% of salicylic acid. (30 Marks)

08. Extemporaneous compounding practice are an essential part of pharmacists' competency.

8.1 What do you understand by 'Extemporaneous preparation'? (10 Marks)

8.2 List the safety measures which must be taken into consideration when preparing a product extemporaneously. (15 Marks)

8.3 Write an account on storage and labelling of extemporaneous preparations. (30 Marks)

8.4 State three types of extemporaneous preparations and their containers. (15 Marks)

8.5 List the ten steps of the dispensing procedure of extemporaneous preparation. (30 Marks)