BACHELOR OF PHARMACY HONOURS
FMU4501- PHARMACEUTICS II - LEVEL 4
FINAL EXAMINATION
DURATION: THREE (03) HOURS

DATE: 28TH MARCH 2024 **TIME: 1.30 P. M. - 4.30 P. M.**

Part B – Short Answer Questions (20 Marks)

1.

1.1 List the five (05) steps involved in manufacturing of parenteral products. (05 marks)

I. .....
II. .....
III. .....
IV. .....
V. .....

1.2 List three (03) specifications for a suppository base. (03 marks)

I. .....
II. .....
III. .....

1.3 Write two (02) advantages of suspensions. (02 marks)

I. .....
II. .....

2.

2.1. List three (03) major fresh blood products. (03 marks)

I. .....
II. .....
III. .....

2.2 Write three (03) examples for plasma derived products. (03 marks)

I. .....
II. .....
III. .....

Index No: .....

2.3 List three (03) steps that must be followed prior issuing fresh blood products. (04 marks)

I. .....

II. .....

III. .....

Index No.....

Part C - Structured Essay Questions (60 Marks)

1.

1.1 List two (02) different types of controlled drug release. (02 marks)

1.2 Write three (03) advantages of controlled drug release system. (03 marks)

1.3 Write short accounts on following mechanisms used to achieve extended drug delivery.

1.3.1 Insoluble polymer matrix system (05 marks)

1.3.2 Osmotic system (05 marks)

2.

2.1 Write one (01) example for each class of A, B, C, D medical devices as per the Global Harmonization Task Force (GHTF) general classification system. (04 marks)

2.2 Write the definition for "Medical Gases". (04 marks)

2.3 Briefly describe the safety aspects of handling medical devices. (07 marks)

3.

3.1 If an insulin injection contains 100 units of insulin in each milliliter. How many milliliters should be injected to give a dose of 40 units? (03 marks)

3.2 If 3 salbutamol tablets contain 12 mg of salbutamol, how many tablets could be made from 80 mg of salbutamol? (04 marks)

3.3 If 200 ml of 10% v/v solution is diluted to 1000 ml what will be the percentage strength (v/v)? (05 marks)

3.4 Specific gravity of glycerin is 1.25, calculate the weight (in grams) of 10 ml of Glycerin. (03 marks)

4.

4.1 Define an emulsion. (05 marks)

4.2 List three (03) advantages of emulsions. (03 marks)

4.3 Name two (02) different types of emulsions. (02 marks)

4.4 What is HLB (hydrophile-lipophile balance) value? (02 marks)

4.5 What is the HLB value of a surfactant blend consisting of 20% tween 20 (HLB 16.7), 30% span 20 (HLB 8.6) and 50% span 80 (HLB 4.3)? (03 marks)