

**NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY**

BACHELOR OF PHARMACY (HONOURS)

PHA 3305 – PHARMACY SERVICES AND MEDICINE USAGE

AUGUST 2023

TIME: 3 HOURS

MARKS 100

INSTRUCTIONS

- **ANSWER ALL QUESTIONS**
- **ANSWER EACH QUESTION ON A NEW PAGE**

Question 1: The Prescription (30 marks)

- (a) Define a medical prescription. **(4 marks)**
- (b) Explain extemporaneous prescriptions and non-compounded prescriptions. **(6 marks)**
- (c) List and explain two (2) classifications of medications. **(6 marks)**
- (d) Pharmacist must ensure that the prescription is legally complete and clinically correct for the patient. Suggested way to do this review is by using mnemonic IDEAL CASE. Elaborate how you would use IDEA in IDEAL CASE. **(14 marks)**

Question 2: Packaging of Pharmaceutical Products (10 marks)

- (a) You have compounded a parenteral product with a pH of 5.5. Which packaging material(s) will you use to package this product and why? **(8 marks)**
- (b) In which instances would you use paper in packaging? **(2 marks)**

Question 3: Ophthalmic Products (20 marks)

- (a) You work in a community pharmacy as a pharmacist. A pregnant 30 year old lady who wears hard contact lenses comes to you complaining of increased lens awareness and discomfort. Mention possible causes of her experiencing increased lens awareness and discomfort and what advice would you give this lady. **(5 marks)**
- (b) One of your clients who wear hard contact lenses came complaining of irritation, itchiness, photophobia and blurred vision. You suspect corneal oedema due to corneal hypoxia. Which medication together with counseling will you give your client? **(5 marks)**
- (c) A patient who is a first time user of soft contact lenses has visited your pharmacy because she does not know how to clean her soft contact lenses. Instruct this patient on how to clean his/her soft contact lenses. **(8 marks)**
- (d) Give two (2) reasons why multi-dose eye drops should contain an effective antimicrobial preservative system. **(2 marks)**

Question 4: Parenteral Products and Calculations (20 marks)

- (a) In administration of intramuscular injections for groups mentioned below, mention the injecting sites and why these injecting sites are preferred for the following:
 - (i) Adults **(2 marks)**
 - (ii) Infants and small children **(2 marks)**
- (b) A diabetic patient who is on insulin has been advised by a nurse to inject insulin intramuscularly. The patient comes to you for advice as he has been injecting insulin in

the stomach ever since he was put on insulin. Elaborate on how you would correct this error. **(6 marks)**

(c) During the administration of large volume parenteral fluids additional drugs are often added to the fluids. How can this be carried out? **(2 marks)**

(d) List any two (2) types of large parenteral volume fluids. **(2 marks)**

(e) A chronic diabetic patient receives 70% of his insulin medication as U-40 isophane insulin and the remaining percentage as U-100 mixtard. If the total volume of the medication received by the patient is 2mL, how many units of each type of insulin is the patient taking to maintain his normal blood glucose level? (*Show your calculations*)

(4 marks)

(f) A medication order in a hospital setting calls for U-100 velosulin insulin to be given to a patient of 68.2kg on the basis of 1.5 units/kg per 24 hours. How many units of U-100 velosulin insulin should be administered daily? **(2 marks)**

Question 5: Drug misuse and crime prevention (20 marks)

(a) You work in a community pharmacy that provides services for drug abusers. One of your tasks is to teach a new pharmacist how to carry out supervised consumption for substitute therapy? Which points would you cover in your teaching concerning how to carry out supervised consumption of substitute therapy? **(10 marks)**

(b) There are several advantages for drug users, the community and community pharmacists from providing care at community pharmacies. Mention and elaborate on any five (5) advantages. **(10 marks)**