

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

PHA 4200-PHARMACEUTICAL CARE IN CHRONIC DISEASES

EXAMINATION

January 2024

Duration: 3 hrs

Marks: 100

Instruction: Answer all Questions

Start each question in a new page

1. CHRONIC DISEASES

[20]

The role of a pharmacist in managing chronic diseases is very important. They educate, counsel and support the self-management of chronic diseases, making the lives of patients with these diseases easier.

- I. Diabetes mellitus (150)
 - a. A patient comes to the pharmacy to refill her diabetic medicines. Before you refill the medicines, what issues would you like to discuss with the patient? (5)
 - b. What are the signs and symptoms of diabetic neuropathy and retinopathy? (3)
 - c. Counsel the patient about diabetic foot care and eye care. (2)
- II. Asthma: A newly diagnosed patient comes to the pharmacy to learn how to use inhalers. (10)
 - a. Provide thorough education about how to use beclomethasone, salbutamol, and salmeterol. (7)
 - b. Explain the importance of adhering to instructions given by the pharmacist. (3)

2. HIV/AIDS AND TB

[20]

- I. Over the years, the HIV pandemic hit Lesotho hard as a country
 - a. In your opinion, which HIV strategy turned the HIV pandemic around for Lesotho and how? (4)
 - b. Describe its impact on the pandemic. (8)
- II. TB is a curable disease;
 - a. State why you think Lesotho cannot overcome TB. (5)
 - b. What can be done to overcome TB infections? (3)

3. HPV VACCINATION

[20]

Cervical cancer is the most prevalent cancer in Lesotho. HPV infection is implicated as the cause of cervical cancer. Please discuss prevention strategies for cervical cancer.

- a. Education (7)
- b. Screening (5)
- c. HPV vaccination (8)

4. CANCER TREATMENT

[20]

- I. Describe different types of pain for cancer patients and assist in managing these types of pain. (8)
- II. A patient is due to receive rituximab for treating lymphoma as part of the R-CHOP 21 regimen at a dose of 375 mg/m² for three weeks.
 - i. What dose of rituximab should the patient receive if her BSA is 1.71 m²? (2)
- III. Rituximab is a monoclonal antibody with a high risk of a hypersensitivity reaction. To reduce the risk of a reaction, the drip rate for the infusion is slowly titrated upwards. The following instruction for the first dose at cycle one is given: Infuse at a rate of 50

mg/hour for 30 minutes, and if tolerated, increase by 50 mg/hour every 30 minutes to a maximum dose of 400 mg/hour. Given the following information:

Vial concentration	10 mg/mL
Extra volume added to the bag	65 mL
Total bag volume	565 mL
Final bag concentration	1.15 mg/mL

What rate should be entered on the infusion pump in mL/hour for a bag of rituximab?
Please show your workings for every 30 minutes until 4 hours is reached. **(10)**

5. COVID 19

[20]

- a. The long-term lingering symptoms of COVID-19 are bothersome to most patients who were infected with the disease. State the four most common effects and how to manage them (8)
- b. State what experiences Basotho healthcare workers had when they looked after Covid 19 patients (6)
- c. Describe three common myths around COVID-19 vaccination and how to dispel them. (6)