

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

PHA 4200-PHARMACEUTICAL CARE IN CHRONIC DISEASES

SUPPLEMENTARY

August 2023

Duration: 3 hrs

Marks: 100

Instruction: Answer all Questions

Start each question in a new page

1. 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)

2. CANCER TREATMENT

[20]

- a. State the principles of chemo mixing (8)
- b. A patient is due to receive rituximab, for the treatment of lymphoma, as part of R-CHOP 21 regimen at a dose of 375 mg/m² three-weekly.
 - i. What is the dose of rituximab the patient should receive if her BSA is 1.71 m²? (2)
- c. This drug is a monoclonal antibody and the risk of a hypersensitivity reaction is high. 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 1 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)

3. HIV/AIDS AND TB

[20]

- a. There are several strategies that turned HIV pandemic around for Lesotho, mention 4 key ones and describe their impact on the pandemic (12)
- b. TB is a curable disease, why do you think Lesotho is unable to overcome TB and what can be done to overcome TB infections? (8)

4. CHRONIC DISEASES

[30]

- a. Educate a newly diagnosed patient with diabetes (15)
- b. Assist a patient with self-management of asthma and hypertension (15)

5. COVID 19

[10]

- a. Give a talk about the importance of taking Covid-19 vaccine (7)
- b. How to dispel vaccination myths (3)