



UNIVERSITY OF RUHUNA – FACULTY OF ALLIED HEALTH SCIENCES

DEPARTMENT OF PHARMACY

THIRD BPHARM PART II EXAMINATION – NOVEMBER 2022

PH 3223 PHARMACOTHERAPEUTICS – SEQ PAPER

TIME: TWO HOURS

INSTRUCTIONS

- There are **four** questions in Part A, B, C, D, E and F of this paper.
- Answer all questions.
- No paper should be removed from the examination hall.
- Do not use any correction fluid.
- Use illustrations where necessary.

PART A

01.

1.1.

1.1.1. Name three medical conditions which can be treated by carbamazepine. (15 marks)

1.1.2. Name three new generation antiepileptic drugs. (15 marks)

1.2.

1.2.1. Name three medications that induce parkinsonism symptoms. (15 marks)

1.2.2. Briefly describe pathophysiology of Parkinson's disease. (15 marks)

1.3.

1.3.1. State three reasons for anemia in Chronic Kidney Disease (CKD). (10 marks)

1.3.2. Briefly explain the rationale of using allopurinol in CKD. (10 marks)

1.3.3. Briefly describe the rationale of prescribing 1-alfa cholecalciferol for patients with CKD. (10 marks)

1.3.4. Name three indications for hemodialysis. (10 marks)

PART B

02.

2.1. Briefly describe the risk factors for ischemic heart disease. (15 marks)

2.2. List three first line drug groups available to treat ischemic heart disease and briefly describe their mode of action. (15 marks)

2.3. Name four causes for secondary hypertension. (20 marks)

2.4. Briefly explain stages of hypertension and state the treatment guideline of blood pressure control for each stage. (25 marks)

2.5. As a pharmacist, what are the lifestyle modifications that you would suggest to a patient with hypertension. (25 marks)

PART C

03.

3.1.

3.1.1. Name four conventional Disease Modifying Anti Rheumatoid drugs (cDMARDs) used to treat rheumatoid arthritis. (10 marks)

3.1.2. List two major side effects of each medication mentioned in 3.1.1. (10 marks)

3.1.3. List two monitoring requirements for each medication mentioned in 3.1.1. (10 marks)

3.2. Name five organs/systems that can be affected by Systemic Lupus Erythematosus and major clinical manifestations of those organ involvement. (20 marks)

PART D

3.3.

3.3.1. Compare the aetiology and pathophysiology of asthma and chronic obstructive pulmonary disease. (08 marks)

	Asthma	COPD
Aetiology		
Pathophysiology		

3.3.2. List five important pharmacological agents used in the management of acute exacerbation of asthma along with their preferred routes of administration. (20 marks)

3.3.3. List two types of inhaler devices. (04 marks)

3.3.4. State the two main categories of inhalers used in the management of chronic asthma and give two examples for each of them. (14 marks)

3.3.5. State two important ways by which the drug delivery through an inhaler device can be optimized in a patient. (04 marks)

PART E

04.

4.1. A 51-year-old obese woman was admitted to the psychiatry ward with a history of irritability, poor sleep, over-talkativeness, singing and dancing inappropriately of 3 weeks duration. She thought that she was a goddess with special powers. She had been taking treatment for depression, type 2 diabetes mellitus and hypercholesteremia. Family members stated that she was treated with olanzapine 3 years ago for an episode similar to the current episode. Her body weight was 93 kg.

She is currently on following medications.

Fluoxetine 20 mg mane

Metformin 500 mg bd

Gliclazide 40 mg mane

Atorvastatin 10 mg nocte

4.1.1. Considering her current symptoms, state her psychiatric condition. **(05 marks)**

4.1.2. Write the change that you would suggest to the above medication regimen immediately.

Give the reason for your answer. **(10 marks)**

4.1.3. Name three mood stabilizers that can be used effectively in this patient. **(15 marks)**

4.1.4. She was started on olanzapine again by the treating team. Write your concerns regarding the continuation of olanzapine for this patient. **(15 marks)**

4.1.5. Name one oral typical antipsychotic drug that can be used in this patient. **(05 marks)**

PART F

4.2. A 50-year-old man presented to the chest clinic with cough, mild evening pyrexia, loss of appetite and loss of weight of 3 week duration. He also complained of several episodes of haemoptysis. Clinically he was suspected to have pulmonary tuberculosis.

4.2.1. State the causative pathogen of tuberculosis. **(05 marks)**

4.2.2. How is it transmitted from one person to another? **(10 marks)**

4.2.3. State the usual duration of treatment for pulmonary tuberculosis **(05 marks)**

4.2.4. List the first line drugs used in the treatment of pulmonary tuberculosis. **(10 marks)**

4.2.5. Name three side effects for each anti-tuberculous drug you mentioned in 4.2.4.

(15 marks)

4.2.6. Mention two important advices that you would give this patient regarding anti-tuberculosis treatment/ drugs. **(05 marks)**

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