



33 - Proper

Index number..... M / 98

UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE
THIRD EXAMINATION FOR MEDICAL DEGREES (PART II) – SEPTEMBER 2014
PHARMACOLOGY PAPER I

2½ HOURS

Time – 9.00 a.m. – 11.30 a.m.

Answer each part in a separate book.

Answer all questions.

Part A

1.

1.1. Regarding verapamil,

1.1.1. briefly describe the mode of action.

(20 marks)

10
10
10
30

1.1.2. list three therapeutic indications.

(15 marks)

1.1.3. list two contraindications.

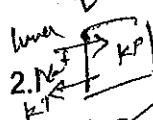
(15 marks)

HF

Thiazide

1.2. Explain the pharmacological basis of selecting frusemide over hydrochlorothiazide to reduce the sodium and water retention in congestive cardiac failure. CHF (30 marks)

1.3. Explain the reasons for doing therapeutic drug monitoring for digoxin. (20 marks)



2.1. Compare the mode of action and therapeutic advantages of clozapine over phenothiazine in the treatment of schizophrenia. (30 marks)

Benzodiazepine

2.2. Lists the drugs used in

2.2.1. acute treatment of migraine.

(10 marks)

2.2.2. induction of general anesthesia.

(10 marks)

2.2.3. unstable angina.

(10 marks)

2.2.4. parkinsonism to reduce rigidity and bradykinesia.

(10 marks)

2.3. Describe the pharmacological basis of using infliximab in rheumatoid arthritis.

(30 marks)

EL-G

cont'd

D MARD'S

Sotalol
 Tolbutamide
 Clofibrate
 K⁺ channel blocker
 Metformin
 Acarbose
 TIF 120 mg
 Repaglinide
 Nateglinide
 MDA

Part B

Compare the mechanism of action, clinical indications and contraindications of the followings.

- 3.1. Propylthiouracil and carbimazole
- 3.2. Metformin and acarbose
- 3.3. Propranolol and carvedilol

(40 Marks)

(30 Marks)

(30 Marks)

Carbimazole
 Methimazole
 PTU
 CI

Trichloro
 Carbameto
 methyl
 PTU

Part C

4. Write short notes on
 - 4.1. competitive antagonism.
 - 4.2. teratogenesis.
 - 4.3. clinical trials.
 - 4.4. dose response curves.

(25 marks)

(25 marks)

(25 marks)

(25 marks)

I II III post surveillance

Part D

5.

5.1. A 12-year old school boy was admitted with acute worsening of bronchial asthma. On admission, he was cyanosed and tachypnoeic. Auscultation revealed widespread rhonchi.

5.1.1. Enumerate the steps in the management of this patient over next 24 hours.

(30 Marks)

5.1.2. Describe the mechanism of action, route and method of administration of one of the drugs mentioned above.

(30 Marks)

5.2. Select the most appropriate pharmacological agent (ONE) for each of the following patients with seizures and mention the reason for your choice.

5.2.1. A 16-year old school girl with juvenile myoclonic epilepsy. (10 Marks)

5.2.2. A 34-year old female with generalized seizures who wishes to become pregnant soon. (10 Marks)

5.2.3. A 45-year old male who developed recurrent seizures during alcohol withdrawal. (10 Marks)

5.2.4. A 09-year old school boy with absence seizures. (10 Marks)

phase I -
 phase II -
 phase III -