



AMALA INSTITUTE OF MEDICAL SCIENCES  
DEPARTMENT OF PHARMACOLOGY  
2022 MBBS REGULAR BATCH

Remedial Exam For Roll no:22005 and 20010  
Paper I

(Topics : General Pharmacology, ANS, Autacoids, Respiratory System, Blood, Diuretics, CVS, CNS)

Time: 3 Hours

Date: 27-01-2023  
17-12-2024 y

Max. Marks: 20+80 = 100 Marks

- Answer All questions neatly and legibly and to the point.
- MCQs should be answered first in the single answersheet provided.
- Write down the most appropriate response (a/ b/ c/ d) in the answer sheet provided. Write only the alphabet and NOT the whole answer.
- The answers to MCQs (Qn.No: i to Qn.No: xx) shall be written continuously on the writing sheet
- Return the MCQ response sheet within the allotted time. (30 minutes)
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together.
- Leave sufficient space between answers. Do not leave any blank pages between answers.
- Draw table/diagrams/flow charts wherever necessary.

PVK  
I. Multiple Choice Questions

Question numbers (i-v) are Single response type:

i. Which of the following anticoagulants is a direct inhibitor of thrombin?

- a) Abciximab b) Rivaroxaban c) Dabigatran d) Warfarin

ii. An opioid which has an antitussive action is:

- a) Dextromethorphan b) Chlophedianol c) Codeine d) Noscapine

iii. Which drug is the most useful in treating an episode of Antipsychotic induced dystonia:

- a) Lorazepam b) Promethazine  
c) Haloperidol d) Phenobarbitone

iv. A 16-year-old girl was brought to the emergency department by her parents who found her with an empty pill bottle. She was confused and reported hearing ringing in her ears; her respiratory rate was 28 breaths per minute. You order investigations and her arterial blood reveals a pH of 7.2. Which of the following drugs did she most likely take?

- a) Paracetamol b) Aspirin c) Allopurinol d) Colchicine



PTO

**Reason (R).** Digoxin has a large volume of distribution

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xvii. **Assertion (A).** Monteleukast is a mast cell stabilizer

**Reason (R).** Monteleukast is effective in Aspirin induced and exercise induced asthma.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xviii. **Assertion (A).** Methadone is used to decrease withdrawal symptoms in Opioid dependence.

**Reason (R).** Methadone is a short acting drug

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xix. **Assertion (A).** Highly plasma protein bound drugs are largely restricted to the vascular compartment.

**Reason (R).** High degree of plasma protein binding makes the drug short acting.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

xx. **Assertion(A).** Sumatriptan is used for the prophylaxis of migraine.

**Reason(R).** Sumatriptan is a 5-HT<sub>1D/1B</sub> agonist.

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, and R is not the correct explanation of A
- c) A is true but R is false
- d) A is false but R is true

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**Question numbers (xi-xv) are Case scenario based:**

A 40 year old male suffered from attacks of chest pain and was diagnosed with Angina pectoris. On examination, his BP was found to be 170/110mm Hg. Lab investigations show FBS-160 mg/dl and serum cholesterol level was 270 mg/dl.

xi. Which of the following antihypertensives is most suitable for initial therapy in this patient?

- a) Nifedipine      b) Hydrochlorothiazide      c) Enalapril      d) Propranolol

xii. Which of the following drugs is used to reduce the frequency of angina pectoris as well as to terminate an acute attack:

- a) Isosorbide dinitrate      b) Pentaerythritol tetranitrate  
c) Diltiazem      d) Dipyridamole

xiii. The patient was started on Atorvastatin for his raised cholesterol levels. The most common side effect of this drug is:

- a) Alopecia    b) Onycholysis    c) Muscle ache    d) Nephrotoxicity

xiv. Which of the following drugs can be used in Hypertensive emergency **except**:

- a) Nicardipine      b) Glyceryl trinitrate  
c) Sodium nitroprusside      d) Propranolol

xv. Which of the following antihypertensive combinations is irrational and therefore should **not** be used?

- a) Nifedipine + Hydralazine      b) Amlodipine + Atenolol  
c) Enalapril + Clonidine      d) Enalapril + Hydrochlorothiazide

**Question numbers (xvi-xx) consists of two statements - Assertion (A) and Reason (R).**

**Answer these questions by selecting the appropriate options given below.**

xvi. **Assertion (A).** Digoxin toxicity is difficult to be treated by hemodialysis



**IV.Short Answers:**

**(6 x 4 = 24 Marks)**

- ES {
10. Therapeutic uses and adverse effects of Frusemide.
11. Write briefly about the use of Prostaglandin analogues in Glaucoma
12. Choose the appropriate drug and justify your choice: Ketorolac / Morphine in a patient with head injury.
13. Write briefly about Z compounds.
- BR
14. What are the therapeutic uses and adverse effects of Lignocaine ?
- VKP
15. How will you motivate a patient with hyperlipidaemia to adhere to your prescribed management ?

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## II. Long Essays:

(2 x 10 = 20 Marks)

2. Enumerate FOUR groups of Antidepressants with ONE example each. What are the uses of these drugs other than in Endogenous depression? Write briefly about Selective Serotonin Reuptake Inhibitors. (4 + 3 + 3 = 10)
3. A 30 year old man developed the following manifestations a minute after he received an injection of a radiocontrast media - wheezing, urticarial rashes with severe itching and progressive difficulty in breathing. His B.P. was recorded as 90/30 mm of Hg.
- a) What is your diagnosis? Write the drug of choice for this situation with the dose and strength. Describe the pharmacological basis for the use of this drug in this condition
- b) What is its preferred route of administration? Write the rationale for preference of this route over other routes.
- c) What other measures should you take to manage this condition?
- d) Write TWO drugs useful to raise bloodpressure in hypotensive states. Explain the mechanism of action of any one of them. (3 + 2 + 3 + 2 = 10)

## III. Short Essays:

(6 x 6 = 36 Marks)

4. Write briefly about drug therapy in Myocardial infarction with the rationale for their use. Discuss the mechanisms of action of Antiplatelet drugs. (4+2 marks)
5. Enumerate THREE drug groups used in treatment of Bronchial asthma with the rationale for use. How will you manage Status epilepticus? (3 + 3 marks)
6. Write the therapeutic uses and adverse effects of Neostigmine. Write briefly about parenteral iron preparations. (3 + 3 marks)
7. Describe the drugs used for Preanaesthetic medication. Write briefly about peripherally acting Skeletal muscle relaxants (3 + 3 marks)
8. Briefly describe drug biotransformation reactions. What are the consequences of microsomal enzyme induction? (3 + 3 marks)
9. Describe the mechanism of action, uses and adverse effects of Sodium Valproate. How will you treat Methanol poisoning? (4 + 2 marks)

