

2019 Scheme

Q.P. Code: 211001

Reg. no.:

Second Professional MBBS Degree Supplementary Examinations December 2025

Pharmacology - Paper I

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

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- 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
- Draw table/diagrams/flow charts wherever necessary

1. Multiple Choice Questions

(20x1=20)

The **MCQ** questions (Q.No. i to Q.No. xx) shall be answered **only in the OMR sheet provided at page No. 51** of the answer book (the inner portion of the back cover page (PART III)). Responses for MCQs marked in any other part/page of the answer book will not be valued. **For marking the correct responses use X mark only**

Question Numbers i – v are Single Response Type

- Which one of the following is an inducer of microsomal enzyme system
a) Omeprazole b) Amiodarone c) Ciprofloxacin d) Chronic alcoholism
- Anticholinergic exclusively used for preanaesthetic medication during anaesthesia
a) Clidinium b) Glycopyrrolate c) Valtiamate d) Tolterodine
- Mast cell stabilizer used in prophylaxis of Bronchial asthma
a) Sodium chromoglycate b) Roflumilast c) Zafirlukast d) Indacaterol
- First line Antiseizure drug used for the treatment of Myoclonic seizure
a) Lamotrigine b) Valproate c) Lacosamide d) Oxcarbazepine
- The antianginal drug that acts by blocking cardiac pacemaker cells, f channels which are funny cation channels
a) Trimetazidine b) Ivabradine c) Nifedipine d) Sodium nitroprusside

Question Numbers vi – x are Multiple Response Type. Read the statements and mark the answers appropriately.

- Therapeutic drug monitoring is useful for the following drugs
1) Anticonvulsants 2) Hypoglycemics 3) Oral anticoagulants 4) Aminoglycoside antibiotics
a) 1 & 2 are correct b) 2 & 3 are correct c) 3 & 4 are correct d) 1 & 4 are correct
- Drugs which are used for smoking cessation
1) Varenicline 2) Bupropion 3) Donepezil 4) Neostigmine
a) 1 & 2 are correct b) 2 & 3 are correct c) 3 & 4 are correct d) 1 & 4 are correct
- Following are TNF α inhibitors used in the treatment of Rheumatoid arthritis
1) Tocilizumab 2) Infliximab 3) Etanercept 4) Abatacept
a) 1 & 2 are correct b) 2 & 3 are correct c) 3 & 4 are correct d) 1 & 4 are correct
- Dopamine agonists used in the treatment of Parkinsonism
1) Ropinirole 2) Entacapone 3) Selegiline 4) Bromocriptine
a) 1 & 2 are correct b) 2 & 3 are correct c) 3 & 4 are correct d) 1 & 4 are correct
- Class III Antiarrhythmic drugs
1) Amiodarone 2) Dofetilide 3) Flecainide 4) Mexiletine
a) 1 & 2 are correct b) 2 & 3 are correct c) 3 & 4 are correct d) 1 & 4 are correct

Question Numbers xi – xv are based on case scenarios. Read the statements and mark the answers accordingly.

A 26 years old female with 24 weeks of pregnancy attended the antenatal clinic with complaints of heaviness in head for 3 days. On examination, her BP was 150/90 mm of Hg with oedema over feet. Her Hb level was 12g/dl

- Which is the ideal antihypertensive drug prescribed for this case
a) Lisinopril b) Losartan c) Labetalol d) Clonidine
- Which of the following antihypertensive drug acts by releasing nitric oxide
a) Atenolol b) Captopril c) Minoxidil d) Sodium Nitroprusside
- Which one of the following is characteristic of Nifedipine in treatment of patients with pregnancy induced hypertension
a) Competitively blocks angiotensin II at its receptor
b) Decrease calcium efflux from skeletal muscle
c) Decrease renin concentration in the blood
d) Decreases calcium influx into smooth muscle

(PTO)

- xiv. Which of the following is a centrally acting antihypertensive drug
 a) Amlodipine b) Clonidine c) Minoxidil d) Milrinone
- xv. Drug of choice for hypertension in eclampsia is:
 a) Magnesium sulphate b) Labetalol c) Nifedipine d) Hydralazine

Question numbers xvi – xx consists of statements – Assertion (A) and Reason (R). Answer these questions by selecting the appropriate options given below.

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

- xvi. **Assertion:** Persistent brassy cough is an important side effect with Angiotensin converting enzyme inhibitors
Reason: Brassy cough with Angiotensin converting enzyme inhibitors is due to inhibition of bradykinin /substance P break down in the lungs
- xvii. **Assertion:** Coadministration of organic nitrates and Sildenafil is always indicated
Reason: Sildenafil markedly potentiates the vasodilator action of nitrates by causing NO release and further vasodilatation and hypotension
- xviii. **Assertion:** Colchicine is useful for the treatment of acute gouty arthritis
Reason: Colchicine enhances polymerization of fibrillar protein tubulin by binding with it and favour the release of chemotactic factors, neutrophil migration and phagocytosis
- xix. **Assertion:** Antiepileptic drugs Phenytoin and Valproate should not be given concurrently
Reason: Valproate displaces Phenytoin from protein binding site, increases the plasma concentration and its toxicity
- xx. **Assertion:** Use of Morphine in a patient with Bronchial asthma is contraindicated
Reason: Morphine can precipitate asthmatic attack by causing direct contraction of bronchial smooth muscles

Long Essays:

(2x10=20)

2. Classify Beta adrenergic blockers. Discuss their adverse effects and therapeutic uses (2+4+4)
3. A 28-year-old woman was brought to casualty with generalized tonic clonic seizures. Diagnosed as a case of status epilepticus
 a) How will you manage this case
 b) Classify Antiepileptic drugs
 c) Explain in detail the mechanism of action, uses and adverse effects of Lamotrigine
 d) Mention the non- epileptic uses of sodium valporate (2+3+4+1)

Short Essays:

(6x6=36)

4. Briefly describe Low Molecular Weight Heparins. Discuss their advantages over conventional Heparin. Mention their indication for use (2+2+2)
5. Discuss in detail - Selective Serotonin Reuptake Inhibitors (SSRI)
6. What are the centrally acting muscle relaxants. How do they differ from peripherally acting muscle relaxants. What are their therapeutic uses. (2+2+2)
7. Enumerate H1 Antihistamines. Write Four indications for use. Advantages of second generation antihistamine over first generation antihistamines (2+2+2)
8. Discuss the uses and adverse effects of Atropine (3+3)
9. What are the various types of drug antagonism. Discuss in detail with examples (2+4)

Short Answers:

(6x4=24)

10. Discuss the Pharmacovigilance Program of India in detail
11. What is Glaucoma. Explain how various topical drugs are useful in Glaucoma management.
12. Explain the mechanism of toxicity and the management of Acute paracetamol poisoning.
13. Discuss the mechanism of action, uses and adverse effects of Frusemide
14. How will you manage patient acute myocardial infarction.
15. How will you show empathy while communicating to a patient.
