

MODEL PAPER
2nd Year Examination, June-2025

Programme: D. Pharm
Year: 2nd Year
Course: Pharmacology
Course Code: ER20-21T

SECTION II

Short Answer type Question

(3 marks each)

Unit-1

1. Define bioavailability. What are the factors affecting it?
2. Describe the advantages and disadvantages of the intravenous route of drug administration.
3. Explain the steps involved in neurohumoral transmission at a cholinergic synapse.
4. Classify cholinergic drugs and mention two clinical uses.
5. What are the pharmacological actions and uses of atropine?
6. Define and classify local anaesthetics agents.
7. Mention name and types of glaucoma and drugs used in their treatment.
8. Classify anti-convulsant drugs and write the mechanism of action of phenytoin.
9. Define microsomal and non-microsomal enzyme.
10. Define NSAIDs. Mention two examples and their common side effects.

Unit-2

11. Classify anti-hypertensive drugs and mention two examples from each class.
12. Write the pharmacological actions and clinical uses of nitro-glycerine.
13. Define and classify anti-arrhythmic drugs with one example from each class.
14. Define shock. Write briefly on drug therapy for hypovolemic and cardiogenic shock.
15. What are hematinic agents? Give examples and their indications.
16. Differentiate between anti-platelet and thrombolytic drugs with examples.

Unit-3

17. Classify anti-ulcer drugs. Mention the mechanism of action and one example of a proton pump inhibitor.
18. What are anti-emetics? Classify them and mention two clinical uses.
19. Classify laxatives. Write indications and contraindications of stimulant laxatives.
20. Define diuretics. Mention the mechanism of action and one example of loop diuretics.
21. Write the physiological role and two clinical uses of thyroid hormones.
22. Mention the clinical uses and adverse effects of corticosteroids.
23. Write two uses each of oestrogen and progesterone.

Unit-4

24. Mention name first-line anti-tubercular drugs and their side effects.
25. Define chemotherapy. Mention any two principles of chemotherapy.
26. Define prostaglandins and mention their role in the human body.
27. Mention two examples of fluoroquinolones and their clinical uses.
28. Classify cephalosporine group of antibiotics.
29. Anti-amoebic agents. Write down the clinical use of it.
30. Classify macrolides and mention their therapeutic use and side effects.

SECTION III

Long Answer type Question

(5 marks each)

Unit-1

1. Explain the process of drug absorption. Discuss the factors affecting drug absorption with examples.
2. Classify adrenergic drugs. Write the pharmacological actions, indications, and contraindications of adrenaline.
3. Classify general anaesthetics. Write a brief note on different stages of anaesthesia.
4. Write down the role of Blood-brain barriers on drug's effect. Write a short note on Plasma Binding Proteins.
5. Define receptor. Classify it. Write a brief note on different types of receptors.

Unit-2

6. Describe the types of angina and the drugs used in its management. Mention the pharmacological actions of nitrates.
7. Classify anti-platelet drugs. Discuss the mechanism of action and uses of aspirin in cardiovascular diseases.
8. Classify bronchodilators and explain the pharmacology of beta-2 adrenergic agonists with suitable examples.
9. Explain the mechanism of action, indications, and adverse effects of oral anticoagulants.
10. Compare and contrast expectorants, mucolytics, and antitussives with examples and clinical uses.

Unit-3

11. Classify oral hypoglycaemic agents. Discuss the mechanism, uses, and contraindications of metformin.
12. Write the physiological role and therapeutic applications of parathormone, calcitonin, and vitamin D in calcium homeostasis.
13. Classify anti-thyroid drugs. Write the mechanism of action and side effects of propylthiouracil.
14. Write a short note on the pharmacological actions and uses of oxytocin.
15. Describe the types of diuretics and explain the mechanism, uses, and side effects of potassium-sparing diuretics.

Unit-4

16. Explain the physiological roles of Histamine, 5-HT (serotonin), and Prostaglandins.
17. Classify penicillin. Write their mechanism of action, uses, and common adverse effects.
18. Define anti-neoplastic agents. Classify it with proper suitable example. Write down the therapeutic use of it.
19. Write short notes on anti-fungal and anti-viral drugs with classification, examples, and uses.
20. Define biologicals. Classify them and mention clinical uses of vaccines, monoclonal antibodies, and immunoglobulins.

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Disclaimer: - This is a Model Paper. The Question in End semester examination will differ from the Model Paper. This Model paper is meant for practice only.