

Time: 3 Hours

Max Marks: 80

Note: Draw diagrams whenever necessary.

Write an essay on any TWO of the following questions: 2 X 10 = 20

1. Explain the basic principles of pharmacodynamics and pharmacokinetics. How do they influence the absorption, distribution, metabolism and excretion of drugs in the body?
2. Describe the anatomy and functional organization of the Autonomic Nervous System (ANS). List and explain the uses, doses and side effects of two drugs that affects the ANS.
3. Explain the role of cardiovascular drugs in treating hypertension and heart failure. Discuss the mode of action, side effects, and therapeutic uses of beta-adrenergic antagonists and calcium channel blockers.

Write a short note on any FIVE of the following: 5 X 6 = 30

4. What is the difference between general and local anaesthetics?
5. List any three types of antihypertensive drugs and explain the mechanism of action of one of them.
6. What are the main therapeutic uses and side effects of opioid analgesics?
7. Describe the role of corticosteroids in managing respiratory conditions.
8. What are diuretics, and how do they help in treating hypertension and heart failure?
9. What are antimicrobial agents, and why is it important to use them responsibly?

Write briefly on the following: 10 X 3 = 30

10. Oxytocin.
11. Give an example of a drug in the treatment of asthma and explain its mechanism of action.
12. What is the primary use of antiarrhythmic drugs?
13. Name one drug that acts as a CNS depressant.
14. What are the functions of lipid-lowering drugs?
15. Explain the role of sodium bicarbonate as an emergency drug.
16. What are thrombolytic drugs used for? Provide one example.
17. What is the mechanism of action of local anaesthetics?
18. Name one type of antimicrobial agent and describe its spectrum of activity.
19. What are the routes of administration for general anaesthetics?