

Subject Title: Medicinal Chemistry

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## Unit - I:

1. Define the following terms. a) Drug b) Pharmacology c) Pharmacophore d) Pharmacodynamics e) Pharmacokinetics f) Metabolites g) Antimetabolites
2. Write a note on Therapeutic Index.
3. Explain the classification of drugs with examples based on structure & therapeutic activity.
4. Describe the mechanism of ADME.
5. Explain routes of administration of drugs?
6. What is disease? Explain different types of diseases with their preventive methods.

## Unit - II:

7. Define Enzyme? Write the mechanism of enzyme action.
8. Write about the factors affecting enzyme action.
9. Give a note on enzyme specificity.
10. Explain enzyme inhibitors and their importance.
11. Discuss about the types of inhibition with examples.
12. Define receptors? Explain drug-action receptor theory.
13. Describe mechanism of drug-action.
14. Write the concept of Agonist & Antagonist with examples.
15. Explain Drug-receptor interactions involved in drug-receptor complex.
16. What is the role of  $-OH, NH_2$  group in drug-receptor binding.
17. What is the role of Quaternary Ammonium salts & double bond in drug-receptor binding.
18. Explain structure-activity relationships of drug molecules with suitable example.

## Unit - III:

19. Write Synthesis & Therapeutic activity of 1) Sulphanilamide 2) Dapsone 3) Penicillin-G
20. Write Synthesis & Therapeutic activity of Chloroquine.

21. Write Synthesis & Therapeutic activity of AZT.
22. Write Synthesis & Therapeutic activity of Cisplatin.
23. Write Synthesis & Therapeutic activity of Isoniazide.
24. Explain about the antidiabetic drugs with suitable examples.
25. Write a note on antiinflammatory drug.
26. Explain antipyretic drugs with example.
27. Give short notes on Omeprazole.
28. Define Anesthetics? Give its classification.
29. Give a short notes on local anesthetics with examples.
30. Give the advantages and disadvantages of Nitros oxide and chloroform.

Unit - IV:

31. Write a short notes on a) Hormones b) Neurotransmitters
32. Explain anti thyroid drug – Carbimazol.
33. Explain sources & deficiency disorders and remedy of vitamins A,D,E.
34. Explain sources & deficiency disorders and remedy of vitamins K,B,C.
35. Explain about anti Parkinson drug-Levodopa.
36. Give a note on Adrenergic drugs-Salbutamol, Atenelol.
37. Explain about Fluoxetine.
38. Give a note on micronutrients and it's sources, deficiency disorders.