Drugs acting on Central Nervous System

1. Explain the most important signs and stages of general anesthetics (10)
2. Mention behavioral changes result from excessive alcohol intake (10)
3. a) Difference between antipsychotic and anxiolytic agents (6)
    b) Give mode of actions of narcotic analgesics (8)
    c) Mention side effects of tri cyclic anti depressants (6)
4. Compare main pharmacological actions of Barbiturates and Benzodiazepines (10)
5. Describe briefly about:
   ✓ Drug dependence (8)
   ✓ Analerepts (4)
6. What are different CNS neurotransmitters? Explain the biochemical mechanism of pain and pyrexia. Explain the role of different drugs in their management.
8. What is schizophrenia? Classify drugs used in the treatment. Discuss the pharmacological actions of butyrophenones.
9. Classify different drugs used in Depression. Discuss the relative merits and demerits of tricyclic compounds and MAO inhibitors in the treatment of depression.
10. Write the Mechanism of action of
    ✓ General anesthetics
    ✓ Benzodiazepines
    ✓ Neuroleptics
11. a) What is depression? Classify drugs used in the treatment of different anti-depressants. Discuss the mechanism of action and therapeutic effects of SSRIs
    b) Give the therapeutic uses of Benzodiazepines
12. Describe the symptoms of opiate poisoning
13. Describe the SAR of barbiturates (8)
14. Explain the Mechanism of antipsychotic effects of haloperidol (8)
15. a). Describe briefly about habit forming drugs (6)
    b). Give therapeutic uses of Aspirin (4)
16. Write briefly on opiate receptors (6)
17. How do anxiolytic act? Comment on this clinical usefulness and associated adverse drug reactions.
18. Enumerate various antipyretic analgesics. How do they act? Comment on their pharmacological actions and side effects.
19. With reference to neuroleptics comment on the following:
    a) Endocrine effect b) Extra pyramidal adverse affect
    c) Ocular toxicity d) Super sensitivity psychosis
20. With reference to Pre-anesthetic medication comment on the following:
    a). Post operative decurarisation
    b). Post operative paralytic ileus
    c). Post operative urinary retention
    d). Post operative dryness of mouth
21. Compare and contrast the pharmacology of Halothane and Diethyl ether
22. Classify hypnotic drugs with examples. Discuss the mechanism of action and uses of barbiturates. Why they are replaced by benzodiazepines in the treatment of insomnia?
23. Write short notes on pharmacology of Codeine?
24. Write the mechanism action of Buprenorphine and its advantages and disadvantages?
25. Write short notes on Cyclooxygenase inhibitors
26. Classify psycho pharmacological agents with examples? Describe the pharmacological actions of Chlorpromazine? Discuss the drugs used in the treatment for schizophrenia (16)
27. Describe the mechanism of action, therapeutic uses and unwanted effects of
   a) Phenytin  
   b) Diazepam  
   c) Caffeine  
   d) Aspirin
28. Write short notes on drug treatment for alcohol addiction?
29. Add a note on pre anesthetic medication

Drugs acting on Kidney

1. Describe the mechanism of action and toxic effects of high ceiling diuretics (10)
2. Classify diuretics with suitable examples. Explain how the following compounds act:
   a) Ethacrynic acid  
   b) Triamterene
3. Add a note on anti diuretics
4. Classify diuretics. Discuss the mechanism of action and therapeutic uses of high ceiling diuretics and carbonic anhydrase inhibitor
5. Explain mechanism of action of thiazide and loop diuretics (10)
6. Compare and contrast the pharmacology of Spironolactone and Amiloride

Drugs Acting on CVS

1. Give comparison of Digitalis and quinidine activity on heart(10)
2. Explain the therapeutic status of ACE inhibitors(4)
3. Classify β-blockers giving examples. Discuss their role in the treatment of hyper tension, angina pectoris and cardiac arrhythmias.
4. Discuss the mechanism of action and therapeutic uses of heparin and oral anti coagulants. What are their major side effects?
5. Discuss the mechanism of action, advantages and disadvantages of clonidine
6. What are anti arrhythmic agents? Classify them, explain their relative merits and demerits.
7. Write short notes on positive inotropic drugs(CARDIOTONICS)
8. Describe briefly the pharmacotherapy of hypertension(8)
9. Describe the effects of Digitalis in CCF(8)
10. Explain action of Quinidine on heart(6)
11. Justify the use of following drugs:
   a) Iso sorbide tri nitrate in angina pectoris
   b) Quinidine in atrial flutter
   c) Digoxin in CCF
Pharmacology-I

Previous Semester Questions

12. Write short notes on the mech. Of action and therapeutic uses of
   a) Digoxin    b) Verapamil
   c) Streptokinase    d) Glyceryl tri nitrate

13. Write short notes on pharmacology of
   √ Plasma substitutes  
   √ Enalpril
   √ Atovastatin

General Pharmacology

1. Add a note on enzyme induction (4)
2. Describe drug interactions which result in altered absorption from GIT (10)
3. Discuss pharmacogenetic factors influencing drug action (6)
4. Describe phase-I reactions of metabolic biotransformation of drugs (10)
5. Define and explain a) Spare receptors  b) Silent receptors
6. Discuss the mechanism of action of any drug that involves receptor G-protein system.
7. Explain a) Agonist  b) Antagonist  c) Partial agonist  d) Inverse agonist with suitable examples. Compare and contrast competitive and non-competitive antagonism
8. Describe phase-II reactions of metabolic biotransformation (10)
9. Outline the general MOA of drugs (10)
10. Outline the drug interactions which result in altered metabolism (10)
11. Write short notes on a) Tyrosine kinase receptors  b)Competitive and Non-competitive antagonism
12. Write short notes on:
    a. Drug tolerance 
    b. Therapeutic index
    c. SAR of drugs 
    d. Drugs acting on enzymes
    e. Physiological antagonism of drugs 
    f. Unwanted effects of drugs
   With suitable examples explain how the drugs which modulate the enzyme activities are therapeutically useful.
13. Write about the following:
    a. Biological half life  
    b. Synergism
    c. G-protein in drug action.
14. Describe how the transmembrane signaling occurring on drug receptor interaction. Give suitable examples in support.
15. Add a note on enzyme induction
Drugs acting on ANS

1. Discuss the mechanism of action and major therapeutic uses of prazosin, terbutaline, timolol
2. Discuss the MOA, adverse reactions and disadvantages of following: Succinyl choline, Dicyclamine
3. Write short notes on β-blockers
4. MOA of bronchodilators
5. Describe how drugs are transported across the membrane (10)
6. Write short notes on reuptake of catecholamine
7. Mention different CNS chemical mediators. Discuss distribution and functions of mediators: Nor-adrenaline and dopamine
8. Classify cholinergic agonists and antagonists based on receptor concept with examples. Write the pharmacological actions and therapeutic uses of atropine (8+8)
9. Write short notes on the pharmacology of (4): Adrenergic β-blockers, Dale’s cvasomotor reversal phenomenon