#### MEDICINAL CHEMISTRY II B pharmacy 5 sem

### Q.P. CODE: BP501T

**10 MARKS QUESTIONS**

1. What are antineoplastic agents? Classify them with example? Discus the mechanism of action of alkylating agents. Outline the synthesis of Meclorethamine.
2. Define and Classify antihypertensive agents? Explain the MOA of Angiotensin Receptor Blockers. Write the synthesis of Methyl Dopa.
3. Define and classify local anaesthetic agents with examples. Explain the SAR of local anaesthetic agents.
4. Define and classify antihistaminic agents with suitable examples and explain the synthesis of diphenhydramine HCl
5. Define and classify diuretics with examples. Explain the mechanism of action of loop diuretics and write the synthesis of furosemide
6. Define and classify local anaesthetics with suitable examples and write the SAR of benzoic acid derivatives
7. What are H1 receptor antagonists? Explain their mechanism of action? Outline the synthesis of Diphenhydramine HCl and Promethazine HCl.
8. Define and classify diuretics with suitable examples. Explain the Mechanism of action of Carbonic anhydrase inhibitors and write the synthesis of Acetazolamide.
9. Define and Classify Local anesthetics with suitable examples and write the SAR of lidocaine derivatives.
10. Define and Classify Antihistaminic agents with examples. Outline the method for synthesis of Diphenhydramine and Promethazine.
11. Define and classify Diuretics with examples? Explain the mechanism of action of Loop diuretics and give the synthesis of Furosemide.
12. Classify local anaesthetic agents and explain their mechanism of action. Write the synthesis and uses of procaine and Dibucaine.
13. Classify antineoplastic agents with example. Outline the synthesis of Mercaptopurine and Methotrexate.
14. Classify antihypertensive agents with examples? Write the MOA of Calcium channels blockers and give the synthesis of Isosorbide dinitrite.
15. Classify local anaesthetic agents and discuss SAR of Benzoic acid and Anilide class of local anaesthetic agents with suitable examples.
16. Define and classify local anaesthetic agent with examples. Outline the synthesis of Benzocaine and Dibucaine.
17. Define and classify Diuretics with examples? Explain the mechanism of action of carbonic anhydrase inhibitors and give the synthesis of acetazolamide.
18. Define antihistaminic agents, classify them with examples. Give the synthesis of promethazine and Triprolidine.
19. Define and Classify antineoplastic agents with suitable examples. Explain the synthesis and uses of Methotrexate?
20. Define and classify diuretics with examples. Explain the mechanism of action of thiazide diuretics and write the synthesis of chlorthiazide.
21. Define and Classify antidiabetic agents with suitable examples. Write the synthesis of tolbutamide.
22. Define and Classify H1 receptor antagonists with suitable examples. Outline the synthesis of promethazine and triprolidine HCl.
23. Define and classify diuretics with examples. Explain the mechanism of action of carbonic anhydrase inhibitors and explain the synthesis of acetozolamide.
24. Define and Classify local anaesthetic agents with suitable examples. Add a note on SAR of lidocaine derivatives.
25. What are H1 receptor antagonists? Explain the mechanism of action and synthesis of promethazine HCl
26. What are antihypertensive agents? Classify with examples and explain the mechanism of action of clonidine
27. Define and classify antidiabetic agents with examples. Write the synthesis and mechanism of action of tolbutamide
28. Define and Classify H1 receptor antagonists with suitable examples. Outline the synthesis of Diphenhydramine and promethazine
29. Define and classify diuretics with examples. Explain the mechanism of action of loop diuretics? Outline the synthesis of furosemide.
30. Define and Classify local anesthetics agents with suitable examples. Add a note on SAR of benzoic acid derivatives.

**5 MARKS QUESTIONS**

1. Define and classify antihistaminic agents with examples and give the synthesis of diphenhydramine HCl.
2. Write a note on antianginal agents. Explain the synthesis of Isosorbide dinitrite.
3. What are antiarrythmic drugs? Write the structure and uses of procainamide HCl, phenytoin sodium, lidocaine HCl and amiodarone.
4. Define antihyperlipidemic agents? Write the structure and uses of clofibrate, lovastatin, cholesteramine and cholestipol.
5. Define coagulants and anticoagulants? Write the structure and uses of warfarin, menadione, acetomenadione and anisindione.
6. Write a note on thyroid and antithyroid drugs.
7. Write the structure and uses of cortisone, hydrocortisone, prednisolone and dexamethasone, Betamethasone
8. Explain the metabolism of steroids.
9. Define and classify local anaesthetics with suitable examples.
10. Define and Classify antihistaminic agents with examples? Give the synthesis and uses of promethazine.
11. Explain the role of alkylating agents as anti cancer drugs.
12. What are calcium channel blockers? Explain the mechanism of action of nifedipine
13. What are coagulant and anticoagulant agents? Write the synthesis of warfarin
14. Explain the chemistry of cardiac glycosides used in CHF.
15. What are antihyperlipidemic agents? Explain the mechanism of action of clofibrate
16. Explain the stereochemistry of steroids.
17. Write the structure and uses of a) Norgestril b) Betamethasone c) Testosterone d) Sildenafil e) Nandralone
18. Write a note on thyroid and antithyroid drugs
19. What are glucosidase inhibitors? Give examples and explain their mechanism of action
20. Classify alkylating agents with examples and outline the synthesis of mechlorethamine
21. Write a note on antianginal agents and explain the synthesis of nitroglycerin
22. What are antiarrythmic drugs? Write the structure and uses of quinidine, procainamide HCl, phenytoin sodium and amiodarone
23. Write a note on antihyperlipidemic agents
24. What are coagulants and anticoagulants? Write the synthesis of warfarin
25. Write the structure and uses of testosterone, diethyl stilbestrol, estrone, prednisolone and dexamethasone
26. Write a note on thyroid and antithyroid drugs
27. Discuss the metabolism of steroids
28. Define and classify oral hypoglycaemic agents with examples and write the synthesis of tolbutamide
29. What are carbonic anhydrase inhibitors? Outline the synthesis and medicinal uses of acetazolamide.
30. Define and Classify antiarrhythmic agents with examples? Give their Medicinal uses.
31. What are antihyperlipidemic agents? Explain their mechanism of action. Write the structure and uses of Clofibrate and Lovastatin.
32. What are anticoagulants? Give the mechanism of action and synthesis of Warfarin
33. Write a note on metabolism of Steroids.
34. Discuss about the drugs used for erectile dysfunction.
35. What are estrogens? Discuss about synthetic estrogens.
36. Define the term hypoglycemic agents. Give the structure of any two sulfonylyreas and outline the synthesis of Tolbutamide.
37. Write a note on H2 receptor antagonists. Give the synthesis of Cimetidine.
38. Outline the synthesis of mercaptopurine and meclorethamine.
39. Explain a note on antianginal agents. Outline the synthesis of nitroglycerine.
40. Define antiarrythmic drugs? Write the structure and uses of quinidine sulphate, phenytoin sodium, tocainamide HCl and mexiletin HCl..
41. Discuss about antithyroid drugs with suitable examples?
42. Write a note on antihyperlipidemic agents.
43. Outline the synthesis of warfarin and give its mechanism of action
44. Describe the nomenclature and stereochemistry of steroids.
45. Write a note on sex hormones.
46. Define antidiabetic drugs. Write the structure and uses of metformin, pioglitazone, glipizide and acrabose.
47. Classify antiarrhythmic agents with examples? Give the synthesis of Disopyramide.
48. Discuss about the medicinal importance of Corticosteroids and give the structures and uses of any two Corticosteroids.
49. Describe the chemistry of oral contraceptives.
50. Write a note on antithyroid drugs and give the structure and uses of any two.
51. What are hypoglycemic agents? Discuss about Glucosidase inhibitors as antidiabetic agents.
52. Write a note on cardiac glycosides used in the treatment of Congestive Heart Failure.
53. Classify antiarrhythmic agents with examples? Give the synthesis of Disopyramide.
54. Write the structure and specific uses of i) Methyl Dopa. ii) Verapamil iii) Hydralazine iv) Captopril v) Clonidine
55. Define antineoplastic agents? Outline the synthesis of Mercaptopurine and Methotrexate
56. Define the term hypoglycemic agents. Give the structure of any two sulfonylyreas and outline the synthesis of Tolbutamide.
57. Define angina pectoris? Write the MOA of Antianginal agents? Write the structure and uses of nitroglycerine and Benazepril.
58. Write a note on drugs used in Congestive Heart Failure.
59. Classify antiarrhythmic agents with examples? Outline the synthesis of Disopyramide.
60. Write a note on anticoagulants and outline the synthesis of Warfarin.
61. Discuss about the medicinal importance of Corticosteroids and give the structures of any two Corticosteroids.
62. Discuss the chemistry of oral contraceptives.
63. Write a note on antithyroid drugs and give the structure and uses of any two.
64. Define Diabetes? Classify antidiabetic agents with examples. Give the mechanism of action and synthesis of Tolbutamide.
65. Explain in detail about histamine receptors and their biological importance.
66. What are potassium sparing diuretics? Outline the synthesis and medicinal uses Chlorthiazide.
67. Write a note on cardiac glycosides used in the treatment of Congestive Heart Failure.
68. What are lipid lowering agents? Give the structure and uses of Lovastatin,Clofibrate and Cholesteramine.
69. Discuss the chemistry of female sex hormones.
70. What are Corticosteroids? Give the structure and uses of Cortisone,Prednisolone, Betamethasone and Dexamethasone.
71. Discuss the Mechanism of action and medicinal uses of Oral contraceptives.
72. What are anticoagulants? Give the mechanism of action and synthesis of Warfarin.
73. Describe the drugs used in the treatment of CHF
74. Describe the structure and uses of testosterone, progesterone, oestriol and oestrione,diethyl stilbesterol
75. Write the structure and uses of L-thyroxin, L-thyronin, propylthiouracil, and methimazole
76. Write a note on antimetabolites. Explain the synthesis of mercaptopurine.
77. Discuss in brief about vasodilators and outline the synthesis of Nitroglycerine
78. Define antiarrythmic drugs? Mention the structure and uses of quinidine sulphate, phenytoin sodium, tocainamide, HCl and mexiletin HCl..
79. Define antihyperlipidemic agents? Write the structure and uses of clofibrate, lovastatin, cholesteramine and cholestipol.
80. Discuss the drugs used in Congestive Heart Failure
81. What are coagulants and anticoagulants? Write the synthesis of Warfarin.
82. Write the structure and uses of Testosterone, Nandralone, Progestrones, Oestrione and Diethyl stilbestrol
83. Write a note on thyroid and antithyroid drugs.
84. Explain the metabolism of steroids
85. Define and classify antidiabetic drugs with examples and write the synthesis of Tolbutamide.
86. Explain the metabolism of steroids.
87. Define and classify antidiabetic drugs with suitable examples.
88. Classify alkylating agents with examples. Outline the synthesis of Mercaptopurine.
89. Discuss a note on Antianginal agents and outline the synthesis of Nitroglycerin.
90. Define and Classify Anti-arrhythmic agents? Give the synthesis disopyramide.

**2 MARKS QUESTIONS**

1. Write the structure of any two calcium channel blocking agents
2. Write the structure and uses of minoxidil and hydralizine HCl
3. Outline the synthesis of disopyramide phosphate
4. Write the structure and uses of drugs used in congestive heart failure
5. Write the structure and uses sildenafil
6. Outline the synthesis of procaine
7. Write the synthesis and uses of any one H2 antagonists.
8. What are gastric proton pump inhibitors? Write the structure of omeprazole.
9. Discuss the importance of histamine receptor
10. Mention the structures and uses of amlodipine and nicardipine.
11. List out the uses of captopril and methyldopate HCl.
12. Explain the mechanism of action of loop diuretics.
13. Explain the mechanism of action of antihyperlipidemic agents.
14. Enumerate the structure and uses of any one drug used in CHF.
15. Enumerate the structure and uses of tadalafil.
16. Explain the synthesis of procaine.
17. Write a note on Insulin and its derivatives.
18. What are gastric proton pump inhibitors? Give the structure of any one example.
19. Outline the synthesis and uses of mechlorethamine.
20. Write the mechanism of action of antimetabolites.
21. Enumerate the synthesis of methyldopate HCl.
22. Write the structure of any two calcium channel blockers.
23. Give the structure and uses of minoxidil and diazoxide.
24. Outline the synthesis of disopyramide phosphate.
25. Write the structure and uses of lovastatin and clofibrate.
26. Outline the synthesis of triprolidine HCl
27. Define H2 receptor antagonist with examples.
28. Name any two natural products used as anticancer agents
29. What are loop diuretics? Write the structure of furosemide and ethacrynic acid
30. Define potassium sparing diuretics with examples
31. Write the structure any two antianginal drugs.
32. Give the structure of any two antiarrythmic agents
33. Write the uses of sotalol and menadione
34. Give the structure and uses of diethyl stilbestrol
35. Write the structure and uses of any two anilide class of local anaesthetics
36. Define proton pump inhibitors? Give the structure of any one example
37. Write the synthesis and uses of mercaptopurine
38. Write the mechanism of action of alkylating agents
39. Write the structure and uses of any two H2 antagonists
40. Outline the synthesis of Warfarin.
41. Write the structure and uses of synthetic estrogens.
42. Write the structure and uses of Meglitinide and chlorpropamide.
43. Write the structure of meclorethamine and cyclophosphamide.
44. Define gastric proton pump inhibitors and write the structure of rabeprazole.
45. Write the structure and uses of tripelenamine and chlorpheniramine
46. What are potassium sparing diuretics? Give the structure of triampterene.
47. Write briefly about nitro vasodilators.
48. Outline the synthesis of cemetidine.
49. Write the structure and uses of lansoprazole and pantaprazole.
50. Explain the mechanism of action of antimetabolites.
51. Write the structures and uses of linsinopril and benazipril.
52. Write the structures and uses of verapamil and nifedipine.
53. Explain the mechanism Enumerate the synthesis of methyl dopa HCl
54. Write the structure and uses of Tadalafil.
55. Write the synthesis of Dibucaine.Give the structure of any two antithyroid drugs.
56. Give the structure and uses of Lovastatin and Menadione.
57. Give the structure and uses of Clofibrate and Cholesteramine
58. Outline the synthesis of furosemide.
59. Explain about Calcium channel blockers.
60. Write briefly about nitro vasodilators.
61. What are gastric proton pump inhibitors? Give examples.
62. What are H2receptor antagonists? Give examples.
63. Give the structure and uses of Azathioprine and Fluorouracil.
64. of action of potassium sparing diuretics.
65. Write the structure and uses of menadione and clopidogrel.
66. Illustrate the importance of Histamine receptors.
67. Write the structures and uses of timolol and quinapril HCl.
68. Write the mechanism of action of thiazide diuretics.
69. Write the structures of diltiazem HCl and nifedipine HCl.
70. Explain the mechanism of action of anticoagulants.
71. Explain the synthesis of Disopyramide phosphate.
72. Write the structure and uses of dexamethasone.
73. Outline the synthesis of benzocaine.
74. Give the structure and uses of Azathioprine and Cisplatin
75. Write the structure and uses of disopyramide.
76. Discuss the mechanism of action of cortisone .
77. Write the structure and uses of chlopropamide and tolbutamide.
78. Write the structure and use of minoxidil.and guanethidine.
79. What are gastric proton pump inhibitors? Give examples
80. Discuss the mechanism of action of osmotic diuretics.
81. What are Calcium channel blockers? Give Examples.
82. Write the structure and use of Nifedipine.and Guanethidine.
83. Write the structure of any two anti hyperlipidemic agents.
84. Write the structure and uses of Amiodarone and Sotalol
85. Write the structures and uses of synthetic estrogens.
86. write a note on Insulin and its derivatives
87. Write the structure and uses of any two aminoalkyl ether derivatives as antihistaminic agents.
88. Write the structure and uses of any two H2 antagonists
89. Explain mechanism of action of gastric proton pump Write a note on drugs used in Congestive Heart Failure.
90. Write the structure and use of Menadione.and Cholesteramine
91. Give the structure and uses of thyroid hormones.
92. Write the structure and uses of Pioglitazone and Metformin.
93. Discuss the mechanism of action of anticancer alkylating agents.
94. List the names and uses of anticancer antibiotics.
95. inhibitors.
96. Write briefly about nitro vasodilators.
97. Discuss the mechanism of action of Acetazolamide.
98. Outline the synthesis of furosemide.
99. Write the structure and uses of any two anticoagulants