



**M.Sc. Chemistry (Sem - IV)**  
**Question Bank (2022-23)**

**C-402 CHEMISTRY OF SYNTHETIC DRUG**

**Q 1. Give the answer of following questions (1 marks each)**

1. What is gastrointestinal track drug?
2. Define the term Sedative and Hypnotics.
3. Enlist all generation of Cephalosporin.
4. Enlist disease in which chemotherapeutic agents are employed.
5. Write the synthesis of Dicycloamine.
6. Define: 'Mucolytic'
7. Enlist the proton pump inhibitor drug.
8. Draw the structure of thiopentone.
9. Give the examples of anti-malarial drug.
10. What are Anti-HIV agents?
11. Write the synthesis of Rosiglitazone.
12. What are H<sub>2</sub> receptor antagonists?
13. Explain the term Antibiotics.
14. Define the term Expectorants.
15. Write the full form of HIV.
16. Enlist the inorganic compounds used as Diuretic agents.
17. Draw the structure of Zidovudine.
18. Give the synthesis of sulfa pyridine.
19. Draw the structure of Amantadine.
20. Draw the structure of Amoxicillin.

**Q 2. Give the answer of any two following questions (4 marks each)**

1. Write the synthesis of Chloroquine and Primaquine.
2. Give the synthesis of Omeprazole and ranitidine.
3. Give the classification of gastrointestinal drug with suitable example.
4. Draw the lifecycle of malaria.
5. Classify anticancer agents.
6. Classify antibiotics on the basis of their action.
7. Write the synthesis of isoniazid and pyrazinamide.
8. Classify Diuretics.
9. Write the synthesis of rosiglitazone.
10. What is anti-asthmatic drug? Write the synthesis of Salbutamol.

**Q 3. Give the answer of any Two following questions (7 marks each)**

1. Write the classification of cephalosporin drug and give at least one synthesis of second generation drug.
2. Classify anti-diarrheal drug and write the synthesis of any two of them.
3. Give the classification of anti-tubercular agents with its structure.
4. Write the classification of hypoglycemic agents. Give the synthesis of Chlorpropamide and Phenformin.
5. Write the general synthesis of sulfonamide and write the structure of Silver sulfadiazine and Sulfadoxine.
6. Define and classify anti-cancer agents. Give the synthesis of any one nitrogen- mustered drug.
7. Write the general synthesis of Sulfa drugs and give its application.
8. Give the classification of anti-fungal drug and write the synthesis of Miconazole and Tolnaftate.
9. Write the general synthesis Flouro-quinolone drug and discuss its SAR.
10. Define the term Adrenergic and Antiadrenergic. Discuss synthesis of each two.
11. Write the synthesis of Amlodipine and Propranolol.
12. Define local anesthetic and give the Synthesis of Verapamil and Lignocaine.
13. Discuss the synthesis of Metronidazole and Ornidazole.
14. Write the synthesis of Atovaquone and Proguanil
15. Give the synthesis of Non sedative anti - allergic drugs.

- 16.
17. Explain cardiovascular drugs and discuss the synthesis of any three.
18. Discuss and explain Nonsteroidal anti-inflammatory drugs and discuss any two synthesis.
19. Draw a malarial life cycle and explain in brief.
20. Write the synthesis of Ibuprofen and Nimesulide.
21. Write the synthesis of Cetirizine and Terfenadine.