



- (c) Classify antiseptic and disinfectants. Draw the structure of drugs of each class. Write their uses.
- (d) Write down the synthesis of Dapsone. Discuss the mode of action and side effects of Dapsone.
- (e) Define and classify antibiotics with suitable example. Draw the structure of drugs in each class.
- (f) Discuss the life cycle of malaria parasite.
- (g) How can you prepare the semi synthetic penicillin?
- (h) Write short notes on Polyene antibiotics as antifungal agent.

- (i) What is the difference between Cephalosporin N and Cephalosporin C ?
- (j) What is the causative microorganism for Tuberculosis ? Write the drug therapy for the treatment of tuberculosis.
- (k) Write down the synthesis of acyclovir. Discuss the mode of action.
- (l) Draw the structure of zidovudine and amantadine. Discuss their mechanism of action.

2. Answer any *eight* questions : 8×5=40

- (a) Discuss the advantages of prodrug over active drug with suitable examples.
- (b) Discuss the SAR of antimycobacterial agents.
- (c) Define and classify Cephalosporin with suitable examples. Outline the synthesis of Cephalothin and Cephalexin.
- (d) Outline the synthesis of the ciprofloxacin. Write down the mechanism of action and use.
- (e) Define and classify anthelmintics with suitable examples. Outline the mechanism of action and synthesis of Mebendazole.

- (f) Classify anti-protozoal agents. Draw the structure of drugs in each class. Discuss the mode of action of drug in each class.
- (g) Explain the stereochemistry and nomenclature of penicillin.
- (h) Write a note on immunosuppressant and immunostimulants.
- (i) What are thyroid and antithyroid drugs ? Write down the regulation and synthesis of thyroid hormone. Write the synthesis of propylthiouracil.
- (j) Write a note on pharmaceutical aids.
3. Answer any *three* questions : 3×10=30
- (a) What do you mean by neoplasm ? Differentiate between malignant cell from normal cell. Classify antineoplastic agents with suitable example. Outline the synthesis and uses of the following compound :
- (i) Thiotepa
- (ii) Methotrexate.
- (b) What are the causative agents responsible for Malaria ? Classify anti-malarial agents with suitable examples. Illustrate the synthetic procedure for any two antimalarial agents.

- (c) What is biotransformation process ? Describe different types of biotransformation process with suitable example.
- (d) What are oral hypoglycemic agents ? Classify oral hypoglycemic agents. Draw the structure of drugs in each class. Write down the synthesis and mode of action of the following drugs :
- (i) Glibenclamide
 - (ii) Methformin.