

PHARMACEUTICAL MEDICINAL CHEMISTRY-II**Paper-2**

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) Question No. 1 is compulsory.(2) Solve any **FOUR** questions from remaining.

(3) Draw neat labelled diagram wherever necessary.

(4) Assume suitable data wherever necessary.

(5) Discuss the reaction, mechanism wherever necessary.

1. Solve any **FIVE** questions of the following :

(a) Describe in brief about life cycle of malaria.

(b) Write brief introduction to combinatorial chemistry.

(c) Write chemical name, structure and synthesis of Acyclovir.

(d) Discuss SAR of chloramphenicol antibiotics.

(e) Describe the degradation of tetracycline antibiotics.

(f) Write a note on antiamoebic agents.

(g) Explain Computer Aided Drug Design (CADD). 20

2. What are antineoplastic agents ? Give the classification, mechanism of action and uses of antineoplastic agents and outline the synthesis of chlorambucil. 15

3. (a) Give the classification of antimalarial agent and discuss SAR of 4-amino quinoline derivatives. 7

(b) Discuss the classification mechanism of action and uses of sulfonamide. 8

4. Define and classify antibiotics with suitable examples and structure. Give the chemical name and synthesis of penicillin G. 15

5. (a) Write about classification of Antitubercular drugs. Explain rationale of combination used in therapy. Give any one synthesis from it. 8

(b) Classify antiviral drugs with suitable examples. Discuss drugs used in AIDS. 7

6. (a) Give the objectives, general principles, physicochemical properties and common approaches of drug design. 8

(b) Describe a brief introduction of genetic engineering in medicinal chemistry. 7

7. Write notes on any **three** of the following :

(a) Methods of QSAR

(b) Antifungal agents

(c) Macrolide antibiotic

(d) Anthelmintic agents. 15