

B.Pharm. Sixth Semester (C.B.S.) Examination
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* of the following :

- (a) Write chemical name, use, side effect and synthesis of Isoniazid.
- (b) Discuss in brief about macrolide antibiotics.
- (c) Differentiate between malignant and benign tumor. Explain different terminologies used to denote cancer.
- (d) Explain 8 amino quinoline derivatives as antimalarials.
- (e) Explain in brief about antiamoebic agents.
- (f) Write chemical name, use and synthesis of chloroquine phosphate.
- (g) Discuss mode of action of sulphonamide. 5×4=20

2. (a) Write in detail SAR of aminoglycoside antibiotics. 8
 (b) Explain concept of genetic engineering and write application of it in medicinal chemistry. 7

3. What is neoplasm ? Classify chemically anti-cancer agents and discuss about their mode of action and toxicity. Give synthesis of any one agent from it. 15

4. (a) Explain different physicochemical properties and common approaches used in drug designing. 8
 (b) Discuss stereochemistry of penicillin and write detail account on its analogues. 7

5. Draw structure of virus. Write four examples of each DNA and RNA type of viruses. Classify antiviral agents chemically and write a note on drugs used in treatment of AIDS. 15

6. (a) What is DOT therapy ? Write in detail about mode of action, toxicity and chemical classification of antileprotic agents. 7
 (b) Write chemical classification and mode of action of antifungal agents. 8

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

- (a) SAR of tetracycline antibiotics
- (b) Combinatorial chemistry
- (c) Lactamase inhibitors
- (d) Anthelmintic agents. 5×3=15