

NTK/KW/15/6994

Faculty of Pharmacy

B.Pharm. Fifth Semester (C.B.S.) Examination

PHARMACEUTICAL MEDICINAL CHEMISTRY—I

Paper—II (5 T 2)

Time—Three Hours]

[Full Marks—80

N.B. :— (1) Question No. 1 is compulsory.

(2) Solve any **FOUR** questions from the remaining.

(3) Discuss the reaction, mechanism wherever necessary.

1. Solve any **five** of the following : 20

(a) Write a brief note on drug receptor interactions.

(b) What are bronchodilators ? Write chemical structures and names of any two compounds of this class.

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

(d) Discuss SAR of antiepileptic drugs.

(e) Write in detail about Glucuronic acid conjugation reaction of drug metabolism.

- (f) Enlist various physicochemical factors affecting biological activity of drugs.
- (g) Write in brief about treatment of Urinary tract infections.
2. (a) What are structurally non specific drugs ? Classify general anesthetics. 7
- (b) Write chemical classification of local anesthetics. 8
3. (a) Write classification, SAR and uses of barbiturates. 7
- (b) Write chemical name, structure, structure activity relationship, mechanism of action, synthesis, uses and metabolism of benzodiazepine class of drugs. 8
4. Write a detailed note on opioids as analgesics. 15
5. (a) Give classification of oral hypoglycemics. 7
- (b) Explain applications of prodrugs with the help of suitable examples. 8
6. (a) Summarize mechanism of action and SAR of drugs used in the treatment of psychoses. 7
- (b) Write classification of antidepressants giving Synthesis of any one drug of this class. 8

7. Write notes on any **three** of the following : 15
- (a) Prostaglandins.
- (b) Treatment of Parkinsonism.
- (c) NSAIDs as antiinflammatory agents.
- (d) Treatment of Allergic Rhinitis.