

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

- Write a brief note on drug receptor interactions.
- What are bronchodilators ? Write chemical structures and names of any two compounds of this class.
- Write chemical name, structure and synthesis of Lidocaine.
- Discuss SAR of antiepileptic drugs.
- Write in detail about Glucuronic acid conjugation reaction of drug metabolism.

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| (f) Enlist various physicochemical factors affecting biological activity of drugs. | | 7. Write notes on any three of the following : | 15 |
| (g) Write in brief about treatment of Urinary tract infections. | | (a) Prostaglandins. | |
| 2. (a) What are structurally non specific drugs ? Classify general anesthetics. | 7 | (b) Treatment of Parkinsonism. | |
| (b) Write chemical classification of local anesthetics. | 8 | (c) NSAIDs as antiinflammatory agents. | |
| 3. (a) Write classification, SAR and uses of barbiturates. | 7 | (d) Treatment of Allergic Rhinitis. | |
| (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 | | |