



PHARMACEUTICAL MEDICINAL CHEMISTRY—I

Paper—2

Time : Three Hours]

[Maximum Marks : 80

- N.B. :—** (1) Question No. 1 is compulsory.
(2) Attempt any **four** questions out of remaining.
(3) Discuss the reaction, mechanism wherever necessary.

1. Attempt any **five** of the following :

- Write Chemical name, use and synthesis of phenobarbitone.
- Discuss about blood brain barrier.
- Write note on drugs used in treatment of Alzheimer's disease.
- Explain in detail about oxytocics.
- Enlist different physicochemical parameters affecting drug action. Explain any one of them.
- Write Chemical name, use and synthesis of tolbutamide.
- Write note on CNS stimulant agents. 5×4=20

2. What is Asthma ? Classify chemically antiasthmatic agents. Give synthesis of any one drug and write briefly on antitussive and decongestant. 15

- Discuss about thyroid hormones and antithyroid drugs. 7
- Explain chemistry of hypoglycemic agents with examples. 8

4. What are different biological factors affecting drug metabolism ? Write in detail about functionalisation and conjugation reactions with different examples. 15

5. What are NSAID's ? Explain salol principle with examples. Write in detail chemical classification of NSAID's giving synthesis and uses of Ibuprofen. 15

- What is convulsion ? Write chemistry of anticonvulsant agents with suitable examples. 8
- Write note on prostaglandins and eicosanoids. 7

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

- Principles of prodrug design and applications
- Drugs used in Parkinsonism
- Antidepressants
- Local anaesthetics. 3×5=15