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25-PC-22

**M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION
MAY - JUNE 2025**

PHARMACEUTICAL CHEMISTRY

Paper - II

[Principles of Organic Pharmaceutical Chemistry - II]

[Max. Marks : 75]

[Time : 3:00 Hrs.]

[Min. Marks : 26]

Note : Candidate should write his/her Roll Number at the prescribed space on the question paper.
Student should not write anything on question paper.
Attempt all five questions. Each question carries an internal choice.
Each question carries **15 marks**.

Q. 1 Write a brief note on **any two** of the following -

- i) Classification of drugs on the basis of chemical structure.
- ii) Any 2 drug receptor theories.
- iii) Mechanism of receptors.
- iv) Classification of receptors.

Q. 2 Explain relation of biological action to properties like Ionization, Partition coefficient and hydrogen bonding ?

OR

Explain factors affecting metabolism, elimination and distribution ?

Q. 3 Describe preparation and uses of **any two** of the complex metal hydride -

- i) Lithium Aluminium hydride.
- ii) Diazomethane.
- iii) Osmium Tetra oxide.

Q. 4 Write a detailed account on synthesis, chemical properties and applications of Indole ?

OR

Write a detailed account on synthesis, chemical properties and applications of Oxazole.

P.T.O.

Q. 5 Give a detailed account on any two chemical reactions and their mechanism of the following chemical reactions -

- i) Friedal Crafts reaction.
- ii) Cannizzaro's reaction.
- iii) Aldol Condensation.
- iv) Reimer Tiemann reaction.

