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## M.Sc. II SEMESTER [MAIN/ATKT] EXAMINATION JUNE - JULY 2024

## 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 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 the drugs on the basis of their therapeutic action.
  - ii) Any two theory of drug receptor.
  - iii) Classification of receptors.
  - iv) Mechanism of receptors.
- Q. 2 Explain relation to biological action to acid base properties and stereochemistry of drug.

OR

- a) Discuss pathways of metabolism of drug with suitable example.
- b) Describe factors affecting drug absorption.
- Q. 3 Describe preparation and uses of any two of the following complex metal hydride
  - i) Lithium Aluminium Hydride.
  - ii) Raney Nickel.
  - iii) Lead tetraacetate
  - iv) Diazomethane.
- Q. 4 Write synthesis, methods chemical properties and application of quinoline.

Discuss synthesis methods, chemical properties and applications of pyrazole.

## Q. 5 Explain any two mechanism of the following reactions -

- i) Addition reaction of Grignard reagent to saturated and unsaturated carbonyl compounds.
- ii) Addition reaction of organo zinc reagent to acid ester and Nitriels.
- iii) Aldol Condensation.
- iv) Perkin Reaction.

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