

INDIRA UNIVERSITY, PUNE

SCHOOL OF PHARMACY- M. PHARM (PHARMACOLOGY)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Advanced Pharmacology – I
Subject Code: MPL102T

Max. Marks: 75
Time: 3 Hours

Instructions

- All questions are compulsory. Write two sections on separate answer sheets
 - Neat diagram must be drawn wherever necessary.
 - Figures to the right indicate full marks.
-

Section : I

Q.1 Solve any ONE from the following **15 Marks**

- a What is Parkinson's disease? Describe the pharmacology of L-Dopa
- b Explain in detail the dynamics of drug absorption, distribution, biotransformation and elimination

Q.2 Solve any FOUR from the following **20 Marks**

- a Classify antiepileptic drugs. Explain the pharmacology of phenytoin.
- b Differentiate between Local and General Anaesthetics.
- c Write a note on Organophosphate compounds poisoning.
- d Illustrate how G-protein coupled receptors are involved in drug action
- e Write a note on Nonadrenergic and Noncholinergic (NANC) transmission.
- f Write a note on structural and functional families of receptors

Section : II

Q.3 Solve any ONE from the following **15 Marks**

- a Classify anticoagulants. Describe Pharmacology of Low Molecular weight Heparins.
- b Define Atherosclerosis. write the pharmacology of HMG -CoA reductase inhibitors.

Q.4 Solve any TWO from the following **15 Marks**

- a Explain mechanism of action and adverse effects of Imipramine.
- b Elaborate on Pharmacology of L-Dopa. Add a note on Levodopa and carbidopa coadministration.

- c** Write about management of myocardial infarction.
- d** Describe the pharmacology of drugs used for the treatment of Alzheimer's disease

Q.5 Solve any TWO from the following

10 Marks

- a** What are the advantages of ARB's over ACEIs.
- b** Explain the role of Phosphodiesterase inhibitors in CHF.
- c** Explain in detail the biosynthesis of Prostaglandins.
- d** Describe the pharmacology of thiazide diuretics