

**PHARMACOLOGY**

PAPER – IV

PHARMA/D/15/34/IV

Time : 3 hours

Max. Marks : 100

**Important instructions:**

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

**Write short notes on:**

1.	a) Enumerate patient safety and pharmacovigilance. b) Pharmacovigilance programme of India(PVPI).	5+5
2.	Mention different endothelin receptors, drug acting on endothelin receptor, their therapeutic use, adverse effect and precautions.	2+2+2+2+2
3.	Procedure for Investigational New Drug (IND) and New Drug Applications (NDA) as per Schedule Y.	5+5
4.	a) Proof of concept in clinical trial. b) Therapeutic misconception	5+5
5.	a) Define biomarker. b) Uses of biomarkers for personalized medicine. c) Biomarker regulatory validation.	2+3+5
6.	a) Therapeutic drug monitoring of immunosuppressive drug. b) Accreditation of the therapeutic drug monitoring laboratory.	5+5
7.	a) Signal review of medicinal product b) Biovigilance	5+5
8.	a) Novel analgesic targets for treatment of pain. b) Neuronal nicotinic receptors as targets for novel analgesics.	5+5
9.	a) Compensation in clinical trial. b) Role of Ethics Committee as per amendment of Schedule Y.	5+5
10.	a) Enumerate various histaminic receptors. b) Clinical use of anti-histaminics, adverse effects and precautions.	2+(3+3+2)

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