# PHARMACOLOGY <br> 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. <br> 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. <br> b) Therapeutic misconception | 5+5 |
| 5. | a) Define biomarker. <br> b) Uses of biomarkers for personalized medicine. <br> c) Biomarker regulatory validation. | $2+3+5$ |
| 6. | a) Therapeutic drug monitoring of immunosuppressive drug. <br> b) Accreditation of the therapeutic drug monitoring laboratory. | 5+5 |
| 7. | a) Signal review of medicinal product <br> b) Biovigilance | 5+5 |
| 8. | a) Novel analgesic targets for treatment of pain. <br> b) Neuronal nicotinic receptors as targets for novel analgesics. | 5+5 |
| 9. | a) Compensation in clinical trial. <br> b) Role of Ethics Committee as per amendment of Schedule Y. | 5+5 |
|  | a) Enumerate various histaminic receptors. <br> b) Clinical use of anti-histaminics, adverse effects and precautions. | $2+(3+3+2)$ |

