

PHARMACOLOGY

PAPER-I

Time: 3 hours
Max. Marks:100

PHARMA/J/20/34/I

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. What is the importance of ABC transporters in drug absorption & elimination? Enumerate the drugs which are significantly affected by ABC transporters. 6+4
2. What is Pharmacovigilance? Outline National & International initiatives taken for Pharmacovigilance. Discuss methods of causality assessment and their role in Pharmacovigilance. 2+4+4
3. a) Fetal therapeutics. 5+5
b) Teratogenicity.
4. Discuss the application of clinical pharmacokinetic principles in drug development. 10
5. a) Performance enhancing drugs. 5+5
b) Biosimilars.
6. What is Pharmacogenetics? Describe its principles. Discuss its role in clinical practice. 3+3+4
7. Discuss how the principles of chronopharmacology can improve drug therapy. 10
8. a) Explain nanoparticle dosage forms and their clinical applications. 5+5
b) Drug clearance.
9. What is NLEM and its importance? What are the important factors taken into consideration for inclusion of drugs in the NLEM? 5+5
10. a) Inverse agonist. 5+5
b) Importance of drug food interaction.
