



PHARMACOLOGY

PAPER – IV

PHARM/D/14/34/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.

1. Enumerate various serotonergic receptors. Discuss clinical uses of serotonin agonists and antagonists giving suitable examples. 3+(3+4)
2. What are the different new drug delivery systems available for clinical use? Discuss merits and demerits of each one of them giving suitable examples. 2+(4+4)
3. Compare and contrast between:- 10
 - a) Fixed dose drug combinations (FDC's)
 - b) Drugs used in combinations
4. Discuss the role of CTRI, schedule Y and GCP guidelines in the conduct of a clinical trial. 2+4+4
5. What do you understand by the terms pharmacogenetics and genomics? Discuss the role of pharmacogenetic variations that can influence drug therapy. Discuss the role of pharmacogenetics in clinical practice. (2+2)+4+2
6. Discuss the ethical principles to be followed while conducting clinical trials. According to the recent guidelines, what are the roles and responsibilities of 'Institutional Ethics Committee' (IEC) with regard to payment of compensation in the event of an adverse drug reactions occurring during clinical trial? 2+4+4
7. What do you understand by the term "Therapeutic Drug Monitoring" (TDM)? Discuss giving suitable example, how you conduct TDM at:
 - a) Pharmaceutic level
 - b) Pharmacokinetic level
 - c) Pharmacodynamic level
 - d) Therapeutic level 2+(2+2+2+2)
8. What do you understand by "rational therapeutics"? Discuss briefly the rational use of antimicrobial agents with special reference to their importance in clinical practice. Give suitable examples. 2+8

