PHARMACOLOGY

PAPER - IV

PHARM/D/13/34/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. Write briefly about GABA receptor. Enumerate the drugs acting on them. Discuss the clinical uses of these agents. 3+3+4

2. Define endothelins. Name the receptors on which they act. Describe the inhibitors of endothelin system. Discuss briefly the physiological and pathological role of endothelin. 2+2+3+3

3. Define nociception. Describe the chemical mediators involved in nociceptive pathway. Give a description of the drugs modulating them. 3+3+4

4. Describe the various type of drug antagonism along with their mechanism. Give suitable examples to illustrate your answer. 7+3

5. Enumerate various serotonergic receptors. Discuss uses of serotonin agonists and antagonists giving suitable examples. 3+3+4

6. What do you understand by Novel Drug Delivery System (NDDS)? What are the objectives of developing NDDS? Describe targeted delivery of drugs by particulate carriers. 2+4+4

7. Enlist various prostaglandins. Discuss their patho- physiological role and uses of these agents. Illustrate your answers giving suitable examples. 2+4+4

8. Discuss the thyroid hormone with special reference to: 3+3+4
   a) Synthesis, storage and release
   b) Physiological effects
   c) Clinical usage

9. Discuss various types of calcium channels. Enumerate the drugs modulating them. Discuss the pharmacological implications of these drugs. 2+4+4

10. Explain the mechanism of cardiac glycosides as arrhythmogenic and anti-arrhythmics agents. Discuss the management of arrhythmias caused by them. 5+5

****