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:
   a) Synthesis, storage and release
   b) Physiological effects
   c) Clinical usage  
   3+3+4

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