

Total No. of Questions : 6]

SEAT No. :

**P1991**

**[5145]-503**

[Total No. of Pages : 2

**Third Year B.Pharmacy**  
**353: MEDICINAL CHEMISTRY-I**  
**(2013 Pattern) (Semester - V)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Answer to the two sections should be written in separate answer books.*
- 3) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** What are antihypertensive agents? Discuss with one example from each class, SAR and MOA of antihypertensive agents. **[10]**

OR

Define receptor. Enlist the different types of receptor. Explain in detail about various forces involved in drug-receptor interactions. **[10]**

**Q2)** Answer the following (Any Five): **[15]**

- a) Write a short note on beta blockers.
- b) Discuss SAR and MOA of potassium sparing diuretics.
- c) Give synthesis of methyldopa.
- d) Add a note on Ferguson principle.
- e) Write a note on receptor site theories.
- f) Explain in detail biosynthesis, storage and release of acetylcholine.
- g) What is protein binding? Write significance of protein binding.

***P.T.O.***

**Q3) Write a short note on (Any Two) [10]**

- a) Stereochemical factors affecting drug actions.
- b) Signal transduction mechanism.
- c) Cholinergic receptor.
- d) Cardiotonics.

**SECTION - II**

**Q4) Explain in detail SAR and MOA of sympathomimetic drugs. [10]**

OR

Write MOA of anti-anginal agents and classify it with one example from each class. [10]

**Q5) Answer the following (Any Five) [15]**

- a) Write synthesis of prazosin.
- b) Add a short note on anticoagulants.
- c) Discuss SAR of acetylcholine.
- d) Highlight of neuro-muscular blocking agents.
- e) Comment on adrenergic receptors along with their locations.
- f) Explain and classify ganglionic blocking agents.
- g) Give focus on bioisosterism.

**Q6) Write a short note on (Any Two) [10]**

- a) Biosynthesis, storage and metabolism of catecholamines.
- b) Alpha blockers.
- c) Osmotic and loop diuretics.
- d) Conjugation reaction.

