

Total No. of Questions :6]

SEAT No. :

[Total No. of Pages :2

**P1452**

**[5049] - 503**

**T.Y.B. Pharmacy**

**MEDICINAL CHEMISTRY - I**

**(2013 Pattern) (Semester - V)**

*Time : 3 Hours]*

*[Max. Marks :70*

**Instructions:**

- 1) *All Questions are compulsory.*
- 2) *Answer to the two Sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Correct structure / s must be drawn wherever necessary.*
- 5) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** Explain in detail physicochemical properties affecting drug action. **[10]**

OR

Explain in detail Acetyl choline esterase inhibitors.

**Q2)** Answer the following (ANY FIVE) **[15]**

- a) Add a note on anticoagulants.
- b) Explain in detail biosynthesis and release of Acetylcholine.
- c) Add a note on Ferguson principle.
- d) Give SAR of thiazide diuretics.
- e) Give SAR of Acetylcholine.
- f) Explain in BBB.
- g) Explain the role of intracellular cyclic nucleotide.

**P.T.O.**

**Q3)** Write short notes on any two. **[10]**

- a) Cardiac glycosides.
- b) Calcium channel blockers.
- c) Stereochemical aspects of drug action.
- d) Explain Ing's rule of five.

**SECTION - II**

**Q4)** Classify sympatholytics. Give the chemical features of each class and explain SAR of it. **[10]**

OR

Give synthesis of **[10]**

- a) Atenolol
- b) Prazocin
- c) Losartan
- d) Guanethidine

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

- a) Give structures of Propranolol, Muscarin, Nicotine.
- b) Explain role of Actin-Myosin system in myocardial contraction.
- c) Explain role of MAOs.
- d) Give structures of non selective  $\beta$  blockers.
- e) Give synthesis of methyl dopa.
- f) Give structure and uses Hyoscine.
- g) Give structures of any three Angiotensin Converting Enzyme inhibitors.

**Q6)** Write short notes on any two. **[10]**

- a) Adrenergic agonists
- b) Anti-hyperlipidemic drugs
- c) Bioisosterism
- d) Diuretics

