

Total No. of Questions : 6]

SEAT No. :

P3163

[Total No. of Pages : 2

[5245]-503

Third Year B. Pharmacy (Semester - V)

MEDICINAL CHEMISTRY - I

(2013 Pattern)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

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

SECTION - I

Q1) Discuss SAR and MOA of anti-hyperlipidemic agents. **[10]**

OR

Write in detail about design of drugs affecting adrenergic nervous system.
Explain drugs affecting biosynthesis of norepinephrine.

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

- a) Explain role of intracellular cyclic nucleotides along with their structures.
- b) Discuss SAR and MOA of potassium sparing diuretics.
- c) Sketch out synthetic scheme for hydralazine.
- d) What is protein binding? Write its significance.
- e) Comment on receptor site theories.
- f) Write a note on Ferguson principle.
- g) What are cardiotonics? Explain in detail

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

- a) Write synthesis of prazosin.
- b) Discuss SAR and MOA of acetylcholine antagonist.
- c) Add a note on conjugation reactions.
- d) Sketch out synthetic scheme for furosemide.

P.T.O.

SECTION - II

Q4) Define receptor. Write types of receptors. Explain in detail about forces involved in drug receptor interactions. **[10]**

OR

What are antihypertensives? Classify with suitable example. Discuss its SAR and MOA.

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

- a) Sketch out synthetic scheme for dicyclomine hydrochloride.
- b) Write a note on cholinergic receptors.
- c) Comment on acetylcholinesterase inhibitors.
- d) Write synthesis of losartan.
- e) Highlight Ing's rule of five.
- f) Explain in detail bioisosterism.
- g) Classify and explain anticoagulants.

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

- a) Write biosynthesis, storage, release and metabolism of acetylcholine.
- b) Comment on beta blockers.
- c) Classify ganglionic blocking agents with suitable example.
- d) Sketch out synthetic scheme for terbutaline.

