

Final Yr.
1/1/p3/ksl/upq/oct uetk
Con. 4637-08.
Nov. 08

P. ceutical & Med. Chem. - V
(2 Hours)

sem VII
RS- 4736
[Total Marks : 35
2008-09

- N. B. : (1) Question No. 1 is **compulsory**.
(2) Answer any four questions out of remaining **six**.
(3) **All** questions carry **equal** marks.

1. (a) Write the structure and chemical name of the following drugs :— 3
 - (i) Clonidine
 - (ii) Minoxidil
 - (iii) Gemfibrozil
- (b) Write the structure and important therapeutic use of each of the following :— 4
 - (i) An ACE inhibitor containing thiol function
 - (ii) A naturally occurring murcarinic agonist
 - (iii) A calcium channel blocker containing a benzodiazepine ring.
 - (iv) An antithrombotic containing coumarin nucleus.
2. Give the scheme for the synthesis of the following drugs, mentioning the reagents used at each step (any **two**) :— 7
 - (i) Procainamide
 - (ii) Captopril
 - (iii) Guanethidine.
3. Write short notes on (any **two**) :— 7
 - (i) Anticoagulants
 - (ii) ACE inhibitors
 - (iii) Ganglionic blockers.
4. (a) Classify antihypertensives, giving example of each class. 4
- (b) Discuss the drugs of choice in the treatment of Alzheimer's disease. 3
5. (a) Classify β - blockers based on their receptor binding properties. Write the structure of one drug belonging to each class. 4
- (b) Give an account of synthetic cholinergic blocking agents. 3
6. (a) Explain the mechanism of action of organic nitrates as vasodilators. Write the structures of any three organic nitrates. 4
- (b) Write the metabolic pathway of reserpine. 3
7. (a) What is "Hyperlipidemia" ? What are "Lipoproteius" ? How are they classified ? 5
Discuss the drugs of choice in the treatment of hyperlipidemia.
- (b) What is the importance of lactone ring and hydroxyl groups in the structure of genins ? 2