

[LB 4262]

AUGUST 2012

Sub. Code: 4262

THIRD YEAR B.PHARM. EXAM

Paper II – MEDICINAL CHEMISTRY - I

Q.P. Code: 564262

Time : Three hours

Maximum: 100 Marks

(180 Min) Answer ALL questions in the same order

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

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|--|----|----|----|
| 1. a) What are antihistamines? Classify them with examples. Explain the structure activity relationship of antihistamines. | 19 | 33 | 20 |
| b) Write the synthetic pathway for i) Diphenhydramine HCl ii) Triphenamine HCl iii) Promethazine HCl. | | | |
| 2. Explain in detail about Phase-II metabolic reactions with suitable examples. | 19 | 33 | 20 |

II. Write notes on:

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| 1. Describe the Drug-Receptor Interactions. | 3 | 8 | 5 |
| 2. Write the structure activity relationship of Benzodiazepine. | 3 | 8 | 5 |
| 3. Write the synthesis for a) Carbamazepine b) Valproic acid | 3 | 8 | 5 |
| 4. Write a note on Cholinesterase Inhibitors. | 3 | 8 | 5 |
| 5. What is the Mechanism of action of NSAIDs? Give the synthesis for any one NSAIDs. | 3 | 8 | 5 |
| 6. What are Diuretics? Classify them with examples. | 3 | 8 | 5 |
| 7. Write a note on General Anaesthetics. | 3 | 8 | 5 |
| 8. Elucidate the prostaglandin synthesis from Arachidonic acid | 3 | 8 | 5 |

III. Short Answers:

- | | | | |
|---|---|---|---|
| 1. Structure and uses of Nikethamide. | 1 | 5 | 2 |
| 2. Synthesis of Atenolol. | 1 | 5 | 2 |
| 3. Briefly on Opioid Antagonists. | 1 | 5 | 2 |
| 4. Define Local Anaesthetics with Mechanism of action. | 1 | 5 | 2 |
| 5. Write the structures for a) Ketamine b) Thiopental sodium. | 1 | 5 | 2 |
| 6. Define prodrug with example. | 1 | 5 | 2 |
| 7. Surface activity on Biological action. | 1 | 5 | 2 |
| 8. Synthesis of Salbutamol. | 1 | 5 | 2 |
| 9. Define Neurotransmitter and give examples. | 1 | 5 | 2 |
| 10. Structure and uses of Mecamylamine HCl. | 1 | 5 | 2 |
