

Code: 13R00501

R13

B.Pharm III Year I Semester (R13) Regular & Supplementary Examinations November/December 2016

**MEDICINAL CHEMISTRY – I**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Define prodrugs.
  - Write various types of hydrogen bonding and mention its applications.
  - Write various types of cholinergic receptors.
  - Write two examples of adrenergic agonists with structures.
  - Write the mechanism of action of anti-parkinsonism drugs.
  - Write the basic skeleton and therapeutic uses of benzodiazepines.
  - Write the synthesis of Tranlycypromine.
  - Define analeptics and mention its uses.
  - Write two structures of local anesthetics.
  - Write mechanism of general anesthetics.

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 Explain in detail the concept of soft and hard drugs.
- OR**
- 3 Explain in detail the mechanisms and theories of drug action.

**UNIT – II**

- 4 Write the synthesis of following: (a) Ephedrine. (b) Salbutamol. (c) Prazosin.
- OR**
- 5 Write the classification, mechanism of action and uses of acetyl cholinesterase inhibitors.

**UNIT – III**

- 6 Write the classification, mechanism of action and uses of Barbiturates.
- OR**
- 7 Write in detail chemical classification, mechanism of action of anti-psychotics. Write the synthesis of chlorpromazine.

**UNIT – IV**

- 8 Write a note on analeptics and psychomotor stimulants.
- OR**
- 9 Write in detail classification, mechanism of action of anti-depressants. Mention the structures and uses of newer antidepressants.

**UNIT – V**

- 10 Classify the general anesthetics based on dosage forms. Write the synthesis of halothane and thiopental sodium.
- OR**
- 11 Define local anesthetics. Write the classification and SAR of esters and amines.

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