Total No. of Pages : 02

Roll No.

Total No. of Questions : 10

B.Pharmacy (Sem.–2) PHARMACEUTICAL CHEMISTRY-I Subject Code : PHM-124 Paper ID : [D0149]

Time: 3 Hrs.

Max. Marks : 80

INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

SECTION-A

1. Write a short note on :

- a) Bond dissociation energy.
- b) Dipole moment.
- c) Factor affecting melting point.
- d) Lewis acid.
- e) Tautomerism.
- f) Aprotic solvent.
- g) Sufficient and necessary condition for enantiomerism.
- h) Internal compensation in stereoisomers.
- i) Dextro and levorotatory compounds.
- j) Aldol condensation.
- k) Orbital picture of alkene.

- 1) Test for Secondary alcohol.
- m) Walder inversion.
- n) Nitrene reaction intermediate.
- o) Huckel's rule.

SECTION-B

- 2. Classify isomerism with examples.
- 3. Describe various intramolecular forces affecting melting point of organic compounds.
- 4. Explain the nitrous acid test to distinguish primary, secondary and tertiary amine.
- 5. Differentiate between SN1 and SN2 reactions in alkyl halide.
- 6. Discuss the stability of carbonium ions.

SECTION-C

- 7. a) Describe stereoselective and stereospecific reaction with example of each.
 - b) Describe various types of configurational isomers with suitable examples.
- 8. a) Explain role of solvents in substitution reactions.
 - b) Describe various properties of covalent bond which affect physical properties of organic compounds.
- 9. a) Discuss the acidity of phenol.
 - b) Describe nucleophillic addition in aldehyde with examples.
- 10. a) Describe electrophillic substitution in benzene with one example.
 - b) Write a note on oxidation of alkenes.

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