Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

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.

l) 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.