FirstRanker.com
Firstranker's choice
www.FirstRanker.com www.FirstRanker.com

Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2011 to 2016) (Sem.–2)

PHARMACEUTICAL CHEMISTRY-III (Organic Chemistry)

Subject Code : BPHM-203

M.Code : 46213

Time : 3 Hrs. Max. Marks : 80

INSTRUCTION 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. Answer briefly :

a) Bonding orbitals

b) Debye

c) sp^3 hybridization in ammonia

d) Soft acid

e) Intramolecular hydrogen bonding

f) Secondary bonding

g) Enantiomerism

h) Resolution of racemic mixture

i) Optical inactivity in meso compounds

j) Geometry of carbanion ion

k) Bimolecular elimination reactions

l) Crown ethers

m) Acidity constant of acids

n) Mixed acid used for nitration of Benzene

o) Acidity of picric acid

FirstRanker.com
Firstranker's choice
www.FirstRanker.com

FirstRanker.com
Firstranker's choice
www.FirstRanker.com www.FirstRanker.com

SECTION-B

2. Explain concept stereoselectivity and stereospecificity with example of each.

3. Explain any two reactions involving carbene reaction intermediate.

4. Compare stereochemical aspect of SN1 and SN2 reactions in alkyl halide.

5. Give two postulates of Baeyer's strain theory. What are its limitations?

6. Explain the mechanism of electrophilic addition of hydrogen halide to unsymmetrically substituted alkenes.

SECTION-C

7. a) Describe the preparation of alcohol by oxymercuration-demercuration of alkenes.

   b) Williamson synthesis of ether is nucleophilic substitution reaction. Justify.

8. a) Explain the mechanism of Freidal Craft alkylation in Benzene.

   b) Explain the mechanism of nucleophilic addition in aldehyde by citing example of Aldol condensation.

9. a) Describe electrophilic substitution in Naphthalene.

   b) Compare acidity of benzoic acid and phenol.

10. Write chemical reactions for :

    a) Sulfonation of benzene

    b) Formation of acid by hydrolysis of nitrile.

    c) Conversion of acid to acid chloride.

    d) Formation of diazonium salt.

    e) Formation of sodium salicylate from sodium phenoxide.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

FirstRanker.com
Firstranker's choice
www.FirstRanker.com