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Total No. of Questions : 22

B.Pharma (2017 & Onward) (Sem.–3)

PHARMACEUTICAL ORGANIC CHEMISTRY-II

Subject Code : BP-301T

M.Code : 75105

Time : 3 Hrs. Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A

Choose the correct option in the following objective type questions :

1. As per Huckel rule aromatic compounds contains _____ pi-electrons

   A. 4n+2, B. 2n+4, C. 4n-2, D. 2n-4

2. Benzene undergo electrophilic substitution rather than electrophilic addition because of

   A. Resonance stabilization of reaction product

   B. Stability of intermediate carbocations

   C. Both A & B

   D. None of these.

3. Saccharine is _____

   A. o-Benzenesulphonamide C. p-toluene sulphonyl chloride

   B. p-toluene sulphonamide D. p-amino benzene suphonic acid

4. Electron withdrawing substituent _____ acidity of phenol.

   A. Increases C. Does not effect on

   B. Decreases D. None of these

5. Electron withdrawing group _____ basicity of aniline.

   A. Increases C. Does not affect

   B. Decreases D. A&B both

6. Hydrolysis of fats by NaOH leads to the formation of _____

   A. Soap B. Glycerol C. A&B both D. Detergent

7. Decalin is fully saturated_____

   A. Napthalene B. Anthracene C. Phenanthrene D. Benzene

8. Ring opening reaction in cyclobutane occurs at higher temperature than that of the cyclopropane because it is _____

   A. More stable B. Less stable C. Less strained D. More strained

9. _____ product predominates in electrophilic substitution in naphthalene

   A. α B. β C. γ D. δ

10. Bulky substituent on chair form of cyclohexane is always in_____

    A. Equatorial C. Quasi axial

    B. Axial D. perpendicular to plane of ring

SECTION-B

11. Discuss the directive effect of substituent on electrophilic substitution in monosubstituted benzene.

12. Describe important name reactions of phenol.

13. Describe principle and significance of various constants that are used for analysis of oils and fats.

SECTION-C

14. Explain aromatic characteristic of benzene on the basis of Huckel's rule.

15. Discuss effect of electron-withdrawing and electron releasing group on acidity of phenols.

16. Describe hydrolytic and oxidative rancidification of fats and oils.

17. Describe mechanism of Haworth synthesis of anthracene.

18. Explain Bayer's strain theory.

19. Explain why cyclopentane and cyclohexane are more stable than lower cycloalkane?

20. Discuss the synthesis of Azo compounds from diazonium salt.

21. Describe important preparations of anilines.

22. Explain mechanism of Friedal-craft acylation.

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.