B.Sc. DEGREE EXAMINATION,NOVEMBER 2019
III Year V Semester
Organic Chemistry - I

Time : 3 Hours **Max.marks :60**

Section A $(10 \times 1 = 10)$ Marks

Answer any **TEN** questions

1. Write reduction reaction on ethyl acetate with lithium aluminium hydride.
2. What is a Wittig reagent? How it is useful in organic synthesis?
3. Name any two containing active methylene compound containing active methylene group.
4. Define tautomerism.
5. Write the axial equatorial interconversion of 1,2-dimethyl cyclohexane.
6. Draw the Newmann projections of n-butane.
7. Draw the D and L configuration of glyceradehyde.
8. What is meant by Walden inversion?
9. Write the reaction benzene diazonium chloride with phenol.
10. Give any two synthetic uses of diazomethane.
11. What is MPV reduction?
12. Predict the product of nitrobenzene in acidic medium.

Section B $(5 \times 4 = 20)$ Marks

Answer any **FIVE** questions

13. Discuss the mechanism of MPV reduction.
14. Explain ketoenol tautomerism.
15. Discuss the Cahn-Ingold-Prelog rules with examples.
16. Explain asymmetric synthesis.
17. Compare the basicity of pyrrole and pyridine.
18. Define following terms
    (a)dihedral angle (b)torsional strain.
19. Explain the optical activity of biphenyl.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Explain the mechanism of benzoin condensation and Reformatsky reaction.
21. Dsicuss any five synthetic applications of ethyl acetoacetate.
22. a.Discuss the conformation analysis of cyclohexane. (6)
    b.Draw the erythro and threo representation of tartaric acid. (4)
23. a.Describe any two methods of resolution of racemic mixture. (6)
    b. Discuss the geometrical isomerism (4)
24. a.Give the preparation and chemical properties of furan. (6)
    b.How will you prepare isoquinoline by Bischler-Napieralski synthesis? (4)

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