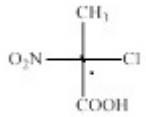
B.Sc. DEGREE EXAMINATION,APRIL 2019
III Year V Semester
Organic Chemistry - I

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

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

Answer any **TEN** questions

1. Convert acetone into propane.
2. Write the uses of Wittig reaction.
3. What are active methylene groups? Give an example.
4. Define tautomerism.
5. Write the R/S notation for.



6. Define torsional strain.
7. What is optical isomerism?
8. Define racemization.
9. How do you convert nitrobenzene into aniline?
10. Give the uses of furan.
11. Give an example for erythro and threo isomers.
12. Write an example of optically active allenes.

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

Answer any **FIVE** questions

13. How are crotonaldehyde and acrolein prepared?
14. How will you convert malonic ester into (i) succinic acid (ii) acetic acid?
15. Discuss the possible conformational isomers of n-butane.
16. Discuss any two methods of resolution of optical isomers.
17. Write the preparation and any one synthetic application of diazomethane.
18. Explain the cis-trans isomerism with suitable example.
19. Compare the basicity of pyrrole, pyridine and methylamine.

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

Answer any **THREE** questions

20. a) Discuss the mechanism of Cannizaro reaction. (5 m)
    b) With the help of suitable example, explain MPV reduction. (5 m)
21. a) Give an account on keto-enol tautomerism. (4 m)
    b) Discuss the preparation and any two synthetic applications of acetoacetic ester. (6 m)
22. Draw the various conformers of cyclohexane and discuss their stability.
23. a) Explain the optical activity of biphenyl. (5 m)
    b) How will you distinguish between geometrical isomers? (5 m)
24. Explain the synthetic applications of diazonium salts.

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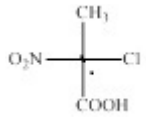

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