C. ABDUL HAKEEM COLLEGE (AUTONOMOUS), MELVISHARAM - 632 509. SEMESTER EXAMINATIONS, NOVEMBER - 2018

B.Sc., CHEMISTRY SEMESTER V U15MCH502 – ORGANIC CHEMISTRY - I

Time: Three Hours Maximum: 75 Marks

SECTION - A $(10 \times 2 = 20 \text{ Marks})$

Answer **ALL** Questions.

- 1. How will you distinguish between glucose and fructose?
- 2. How are carbohydrates classified?
- Write a short note on Walden inversion.
- 4. Explain the term E and Z notation.
- 5. Explain keto enol tautomerism.
- 6. Explain amido imido tautomerism
- 7. Write the resonance structure of thiophene.
- 8. Write any two proprieties of pyridine.
- 9. Write the properties of naphthalene.
- 10. What is auxochrome?

SECTION - B (5 X 5 = 25 Marks)

Answer **ALL** Questions.

a) Discuss the configuration of glucose.

Or)

b) Convert an aldohexose to a ketohexose.

- 12. a) Explain optical activity of biphenyl.
- b) Explain geometrical isomerism in maleic and fumaric acids.

(Or

13. a) Explain Cannizarro's reaction.

(Or.)

- b) Explain benzoin condensation.
- a) Explain Hoffmann's exhaustive methylation.

(Or

- b) Explain, why pyrrole is more reactive than furan.
- 15. a) What are Chromophores?

(Or

b) Write the chemistry of naphthaquinones.

SECTION - C $(3 \times 10 = 30 \text{ Marks})$

Answer ANY THREE Questions

- Explain the structural elucidation of sucrose
- Explain the conformers of cyclohexane.
- Explain the synthetic uses of malonic esters
- Explain the methods of opening of heterocyclic rings
- Explain the preparation, structure and synthetic uses of diazomethane.

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