

## P.R. GOVERNMENT COLLEGE (AUTONOMOUS), KAKINADA PG ODD SEMESTEREND EXAMINATIONSM.SC.: OPGANIC CHEMISTRY & ANALYTICAL CUENISTRY

M. Sc., : ORGANIC CHEMISTRY & ANALYTICAL CHEMISTRY
PAPER 3 : ORGANIC CHEMISTRY

DATE 17.04.2023 SESSION FN MAX. MARKS 75 TIME 3 HRS

## SECTION -A (4×15=60)

## Answer all the Questions Each Question Carries 15 Marks

4×15=60 marks

 A) Explain the role of Inductive effect, Mesomeric effect (resonance) and Hyper conjugation in organic molecules.

(Or)

- B) Describe the structure, reactivity and generation of carbon free radicals and carbenes
- A) How do you classify organic compounds into cis-trans, E-Z and Syn-anti nomenclature (Or)
- B) Discuss on the conformations of cyclopentane, cyclohexane..
- A) Describe the synthesis and reactivity of the Quinoline and Isoquinoline systems
   (Or)
  - B) Write notes on i) Pyridazine ii) Pyrimidine and Pyrazine
- 4. A) Explain the synthesis of Quinine

(Or)

B) Write the structure elucidation of camphor

## SECTION -A (5×3=15)

Write any FIVE questions each question carries 3 marks (5×3=15 marks)

- State and explain Huckel's rule
- Explain about Non benzoid compounds
- Define invertomer, Homomer
- Molecular symmetry
- Structure of Isoxazole
- Physiological importance of quinine
- Illustrate Atropidoerism
- 12. Differentiate between conformation and configuration