

V. P. & R. P. T. P. Science College
B.Sc. (Fifth Semester)
Thursday 3rd October, 2013
Subject code: US05CICV01 (Organic Chemistry)
Industrial Chemistry(Vocational)

Time: 03:30 am to 05:00 pm

Total Marks: 30

- Q-1** **Select right option from given in the following questions.** **(06)**
- I** A Free radical is _____
(a) Neutral in character (b) Paramagnetic (c) Shortly lived (d) All the above
- II** Homolytic cleavage of a bond generates _____
(a) Free radical (b) Carbonium ion (c) Carbenes (d) Carbanions
- III** Aldehyde having _____ undergo aldol condensation.
(a) α -hydrogen (b) β -hydrogen (c) δ -hydrogen (d) γ -hydrogen
- IV** In Meerwein – Ponndorf –Verley reduction _____ is used as catalyst.
(a) $(\text{Me}_2\text{CHO})_3\text{Al}$ (c) LiAlH_4 (b) AlCl_3 (d) NBS
- V** Aluminium isopropoxide is an important _____ reagent.
(a) Reducing (c) Brominating (b) Oxidizing (d) Methylating
- VI** Selenium dioxide is an important _____ reagent.
(a) Oxidizing (c) Methylating (b) Reducing (d) Brominating
- Q-2** **Answer any three of the following:** **(06)**
- I** Define term Hemolytic fission.
II What are electrophils? Give an example.
III Write Principal of Diels- Alder Reaction.
IV Write Principal of Meerwein – Ponndorf - Verley reduction
V Discuss the preparation of Aluminium isopropoxide.
VI Illustrate with examples specific uses of N-Bromosuccinimide.
- Q-3** How are attacking reagents classified? Explain with examples. **(06)**
OR
- Q-3** Explain the following reaction with one example each **(06)**
(A) Elimination reaction
(B) Addition reaction
- Q-4** Discuss the "type of Rearrangements" **(06)**
OR
- Q-4** Describe the mechanism and applications of Aldol Condensation **(06)**
- Q-5** Write short note on aluminum isopropoxide **(06)**
OR
- Q-5** Write s note on osmium tetroxide **(06)**

