(b) (i) Write a note on oxidation of cyclohexanols.

(ii) Discuss the conformation and stereo chemistry of n-butane. (5 + 5)

10. (a) Write notes on : (3 + 4 + 3)

(i) Sulphur ylides

(ii) Acylation of enamines

(iii) Robinson annulation reactions.

Or

(b) Write notes on : (4 + 3 + 3)

(i) DIBAL

(ii) Baker yeast

(iii) Trimethyl silyl chloride.

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S.No. 339

12PCH04/ 12POC04

(For the candidates admitted from 2012–2013 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

Second Semester

Chemistry

ORGANIC CHEMISTRY – II

(Common for Organic Chemistry)

Time : Three hours Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Explain E_2 mechanism.

Or

(b) Write notes on cope elimination.

2. (a) Explain Huckel rule with examples.

Or

(b) Discuss antiaromatic compounds.

3. (a) Explain Gattermann – Kochreaction.

Or

(b) Write notes on Chichibabin reaction.

4. (a) Which form of cyclohexane is stable and why?

Or

(b) Explain the stereochemistry of cis and trans decaline.

5. (a) Explain the Reagent 9BBN and its uses.

Or

(b) Write notes on DCC.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) (i) Explain E_1 CB mechanism

(ii) Differentiate Hofmann and Saytzeff rule of elimination. (4 + 6)

Or

(b) (i) Write notes on the completion between elimination and substitution.

(ii) Explain pyrolytic elimination. (5 + 5)

7. (a) Explain the aromaticity in : (5 + 5)

(i) Annulens

(ii) hetero cyclic compounds.

Or

(b) Write notes on : (3 + 4 + 3)

(i) non aromatic compounds

(ii) anti aromatic compounds

(iii) non-benzenoid compounds.

8. (a) (i) Discuss the orientation and reactivity of chloro benzene and Toluene for electrophilic substitution reaction.

(ii) Write notes on Ipso attack. (6 + 4)

Or

(b) Explain : (5 + 5)

(i) S_N Ar mechanism

(ii) Benzyne mechanism.

9. (a) (i) Discuss the stereochemistry of 1, 3 and 1, 4 dimethyl cyclohexane.

(ii) Discuss the conformation of ethylene glycol. (6 + 4)

Or