NOVEMBER/DECEMBER 2018

MCH21 — ORGANIC CHEMISTRY – II

Time : Three hours Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) Describe about neighbouring group participation mechanism.

Or

(b) Write the mechanism of hydroboration of olefins and discuss the sterecochemistry involved in it.

2. (a) Write a note on ozonolysis.

Or

(b) Compare the reduction reaction of sodium cyanoboro hydride and sodium borohydride.

3. (a) Describe Von-Richter rearrangement.

Or

(b) Discuss the mechanism of Favorski rearrangement.

4. (a) Give the synthesis of alkenes using phosphorus ylides.

Or

(b) Explain one group C–C disconnection taking example of simple alcohols.

5. (a) Discuss the methods of preparation of oxazole.

Or

(b) Write one synthetic method for the preparation of Adenine and guanine.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. Explain the mechanism of the following

(a) Benzion condensation.

(b) Stobbe condensation.

7. Discuss the synthetic applications of

(a) DCC

(b) Trialbyl tin hydride.

8. Write a note on Pinacol – Pinacolone rearrangement and explain the migratory aptitude of gropus.

9. Write the synthetic uses of

(a) Trimethyl silyliodide

(b) DIBAL.

10. How will you get testosterone and oestrone from cholesterol?

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