

APRIL/MAY 2018

MCH21 — ORGANIC CHEMISTRY — II

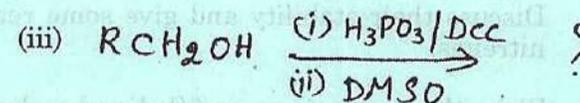
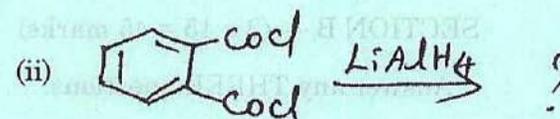
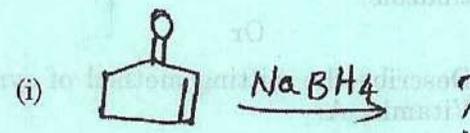
Time : Three hours

Maximum : 75 marks

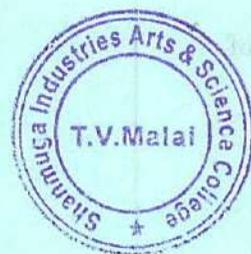
SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

- (a) Write a note on different states of carbene.
Or
(b) Discuss the mechanism of witting reaction.
- (a) Complete the following reaction:



Or



- (b) Discuss the mechanism involved in the oxidation of alcohol with DMSO in combination with DCC.
3. (a) Discuss the mechanism of Baeyer – Villiger rearrangement.

Or

- (b) Write a note on Dienone-Phenol rearrangement.
4. (a) Write a note on Robinson annulations.

Or

- (b) How primary, secondary and tertiary alcohols are prepared using Grignard reactions.
5. (a) Write any three methods of synthesis of thiazole.

Or

- (b) Describe the witting method of synthesis of Vitamin -A₁.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. What are nitrenes? How are they generated? Discuss their stability and give some reactions of nitrenes.
7. Write the synthetic uses of Sodiumborohydride.

8. Describe the mechanism of Wagner- Meerwein rearrangement and explain its stereochemistry.
9. Discuss the synthetic utility of DIBAL.
10. Write the method of conversion of Cholesterol into progesterone.
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