QP CODE: 112331 Reg. No:......

First Semester M.Pharm Degree Regular/Supplementary Examinations March 2020 M.Pharm (Pharmaceutical Chemistry)

Paper II: Advanced Organic Chemistry I (MPC 102T)

(Common for 2017 and 2019 Scheme)

Time: 3 Hours Total Marks: 75

- Answer all questions to the point neatly and legibly
 Do not leave any blank pages between answers
 Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays (3x10=30)

- 1. Give detail mechanism of Brook rearrangement and Dieckmann reaction.
- 2. Compare and contrast SN¹ versus E₁ and SN² versus E₂
- 3. Describe about the applications of aluminium isopropoxide and dicyclohexylcarbodimide (DCC) reagents in organic reactions with examples.

Short Notes (9x5=45)

- 4. Vilsmeier Haack reaction
- 5. Give a strategy for the synthesis of 5 and 6 membered rings.
- 6. Bernthsen acridine synthesis
- 7. Synthesis of trimethoprim.
- 8. Nitrenes.
- Addition reactions.
- 10. Ugi reaction.
- 11. Wittig reagent.
- 12. A compound A on ozonolysis gave equimolar amounts of ethyl methyl ketone and acetone. Give the structure of A.
