THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 344] OCTOBER 2018 **Sub. Code: 2905**

M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH II – PHARMACEUTICAL CHEMISTRY
PAPER II – ADVANCED ORGANIC CHEMISTRY

Q.P. Code: 262905

Time : Three hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Outline the detailed mechanism and discuss the synthetic importance of the following:
   a) Beckmann rearrangement b) Meerwin – Pondroff's reduction.

2. Illustrate the mechanism involved in the pericyclic reactions with its applications. Discuss the various types of such reactions.

II. Write notes on: **(10 x 6 = 60)**

1. Discuss on various Oxidising and Reducing agents used in respective reactions.
2. Discuss on Acids and Bases.
3. Discuss the stability of Carbocations.
4. Mechanism and applications of Michael reaction.
5. Effect of the solvents on mechanism of nucleophilic substitution reaction.
6. Basic theory of photochemical reactions.
7. Iodine is used as a Catalyst for aromatic bromination.
8. Importance of Chiral drugs in Pharmaceutical Chemistry.
9. Outline the synthesis of Indole.
10. Mechanism and synthetic importances of Reformatsky reaction

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