

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

[M.PHARM 0922]

**SEPTEMBER 2022
(APRIL 2022 EXAM SESSION)**

Sub. Code: 2942

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New regulations 2016)
PHARMACEUTICAL CHEMISTRY - MPC
PAPER II - ADVANCED ORGANIC CHEMISTRY - I**

Q.P. Code : 262942

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the mechanism and synthetic applications of
 - a) Ugi reaction.
 - b) Baeyer-Villiger Oxidation.
 - c) Mannich reaction.
 - d) Vilsmeier–Haack Reaction.
2. Discuss about the formation, stability, relative reactivity, orientation and applications of free radicals.

II. Write notes on:

(7 x 5 = 35)

1. Write a brief note on Wilkinson reagent and Wittig reagent.
2. Give an account on the synthetic importance of Debus–Radziszewski imidazole synthesis.
3. Write in detail about rearrangement reactions.
4. Sketch out the synthesis and medicinal uses of Ketoconazole and Metronidazole.
5. Write a note on guidelines for the dissection of molecules.
6. Explain protection of hydroxyl group in organic synthesis.
7. Discuss briefly about stereochemical aspects in SN2 reaction.
