

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

[M.PHARM 0524]

**MAY 2024
(APRIL 2024 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. Discuss the method of formation, stability, synthetic applications, mechanism and orientations of carbocations.
2. Give a detailed account on mechanism and synthetic application of:
 - a) Ullmann coupling reaction
 - b) Dieckmann reaction
 - c) Sandmeyer reaction

II. Write notes on:

(7 x 5 = 35)

1. Give the synthesis and application of Knorr pyrazole.
2. What are the strategies for synthesising a six-membered ring?
3. Outline the synthesis and medicinal uses of Mercaptopurine and Thioguanine.
4. How will you protect the Amino Group in Amino Acid during synthesis?
5. Give a brief account on any one synthetic reagent with its application.
6. Explain Nucleophilic uni and bi-molecular reactions.
7. Write a brief account on the Carbon-carbon disconnection approach.
