

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2942

(APRIL 2020 EXAM SESSION)

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 mechanism and synthetic importance of the following:
 - a) Brook rearrangement.
 - b) Sandmeyer reaction.
 - c) Michael addition reaction.
2. Explain briefly with suitable examples of the following medicinal agents:
 - a) Free radicals.
 - b) Carbanions.
 - c) Nitrenes.

II. Write notes on:

(7 x 5 = 35)

1. Discuss about the role of protection in organic synthesis.
2. Write the synthetic applications of Osmium tetroxide & N-bromosuccinamide.
3. Give the detailed explanation of Combes Quinoline synthesis & Traube purine synthesis.
4. Outline the synthesis and medicinal uses of Chlorpromazine and Antipyrin.
5. Write briefly about the Functional Group Interconversion (FGI) and Functional Group Addition (FGA).
6. Explain Hoffman & Saytzeff's rule.
7. Give the mechanism and applications of Smiles rearrangements.
