

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

[PHARMD 1023]

OCTOBER 2023

Sub. Code: 3804

PHARM. 'D' DEGREE EXAMINATION  
FIRST YEAR (2009-2010 Regulation)  
PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY

*Q.P. Code: 383804*

Time : Three hours

Answer ALL Questions

Maximum : 70 Marks

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Elaborate on the bimolecular displacement reaction with suitable examples.
2. Summarize on any two condensation reactions used as synthetic tools.
3. Distinguish on the mechanism, kinetics and stereo chemistry of SN1 & SN2 reactions with suitable examples.
4. Explain the activating, deactivating O, P and M directing groups in the aromatic compounds.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Brief out on the ionic and non ionic solutes.
2. Explain how the nomenclature of the organic compound is expressed in case of amides and cycloalkanes.
3. Give a note on the preparation, assay and uses of ethylene diamine and methyl salicylate.
4. Give the following general reactions: Michael addition and Wittig reaction.
5. Discuss on the acidity of Phenols.
6. Discuss in brief on 1, 4 – addition reactions of conjugated dienes.

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