

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

[LN 804]

OCTOBER 2018

Sub. Code: 3804

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

*Q.P. Code : 383804*

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Explain the mechanisms of following name reactions:
  - a) Cannizaro and Crossed Cannizaro reaction.
  - b) Kolb's reaction.
2. Write the Mechanism, reactivity, orientation of aromatic electrophilic substitution reaction with suitable examples.
3. Explain Free Radical halogenations of alkanes with its mechanism.
4. Discuss the reaction, mechanism of Nucleophilic aromatic substitution.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Explain the Aldol Condensation.
2. Explain polar and non polar solvents.
3. Preparation, tests for purity, assay and uses of methyl salicylate.
4. Explain Bayer's Strain Theory.
5. Give the preparations of Ethers by Williamson's synthesis.
6. Add a note on Geometrical Isomerism.

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