

[LL 804] OCTOBER 2017 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: $(4 \times 10 = 40)$

1. What do you understand the term Aliphatic Nucleophilic substitution reactions? Explain the reaction, mechanism, kinetic, stereochemistry and factor influence SN₁ reactions.

- 2. Write in detail the mechanism of free radical halogenations of Methane. Discuss its thermodynamics.
- 3. Discuss the reaction, mechanism and its synthetic application of :
 - a) Perkins condensation
- b) Cannizaro reaction.
- 4. Discuss the mechanism of the following:
 - a) Nitration of Benzene b) Chlorination of Propene

II. Write notes on: $(6 \times 5 = 30)$

- 1. Acid base theory.
- 2. Write a note on acidity of carboxylic acid.
- 3. Classification and stability of free radicals.
- 4. Conversion of carboxylic acid to acid chloride and amide.
- 5. Discuss the preparation, assay and uses of Vanillin.
- 6. Oxidation reactions.
