

[LE 804]

APRIL 2014

Sub. Code: 3804

**DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION****FIRST YEAR****PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY***Q.P. Code: 383804***Time: Three Hours****Maximum: 70 marks****Answer All questions****I. Elaborate on:****(2 x 20 = 40)**

1. What are Electrophilic addition reactions? Explain any two reactions in detail.
2. Explain the mechanism and reactions of the following:
  - a) Claisen condensation.
  - b) Knoevenagel reaction.
  - c) Perkin condensation.
  - d) Kolbe reaction.

**II. Write notes on:****(10 x 3 = 30)**

1. Diel's alder reaction.
2. Discuss the mechanism and synthetic uses of Aldol condensation.
3. Give an account of acid and base on the basis of Lewis theory.
4. Give an example for free radical halogenation of alkenes with respect to carbon-carbon double bond acting as a substituent.
5. Write a note on activating and deactivating Ortho, Para and Meta directing groups.
6. Write any two methods of conversion of acid to esters.
7. Riemer –Tiemann's reaction.
8. Write any two methods to prepare alkyl halides.
9. Add a note on carbocations.
10. Write the preparation, test for purity, Assay and uses of Saccharin.

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