

[LM 804]

MAY 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 mechanism of nucleophilic aromatic substitution reactions, orientation and reactivity of benzene.
2. Explain about the resonance stabilization of benzyl radical.
3. What are electrophilic addition reactions? Explain any two reactions in detail.
4. Explain the mechanisms of following name reactions:  
a) Perkin condensation      b) Kolbe reaction.

**II. Write notes on:****(6 x 5 = 30)**

1. Give an account of acid and base on the basis of Lewis theory.
2. Explain the addition reaction of conjugated dienes.
3. Discuss about allylic rearrangement with examples.
4. Write the preparation, test for purity, assay and medicinal use of mephensin.
5. What are cycloalkanes? Give an example. Discuss the preparation of cycloalkanes.
6. Illustrate a note on free radical chain reactions of alkane.

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