

[LH 344]

OCTOBER 2015

Sub. Code: 2905

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH II – PHARMACEUTICAL CHEMISTRY
PAPER II – ADVANCED ORGANIC CHEMISTRY**

Q.P. Code: 262905

Time: Three hours

Maximum: 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the mechanism of Nucleophilic aromatic substitution reactions, orientation and reactivity of benzene.
2. a) Discuss free radical reactions and mechanism with suitable examples.
b) Discuss the formation, stability and reactivity of carbocation and carbanion.

II. Write notes on:

(10 x 6 = 60)

1. Discuss importance of di-functional compounds in synthetic chemistry.
2. Write note on sigma tropic rearrangement.
3. Write note on combinatorial chemistry.
4. Discuss reaction and synthetic importance of Beckmann rearrangement.
5. Write note on importance in chirality.
6. Discuss orbital symmetry rules and their importance.
7. Discuss acid and base theory and its limitations.
8. Write note on chemistry aspect of Phenothiazine.
9. Discuss elimination reactions vs. substitution reactions.
10. Discuss the role of phase transfer catalysts in reduction reactions.
