

[LJ 344]

OCTOBER 2016

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. a) Classify Heterocyclic compounds with examples. Write the preparation and properties of a fused ring structure containing hetero atom.  
b) Write in brief about Carbenes.
2. a) What is Aromatic Electrophilic substitution reaction? Explain the mechanism with suitable examples.  
b) Discuss the methods of deprotection of Carboxyl groups.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Hoffman rearrangement reaction.
2. Selective functional group interconversions.
3. Types of cyclo addition reactions with examples.
4. Di-functional compounds.
5. Write a short note about Ozonolysis.
6. Mannich reaction.
7. Applications of photochemical reaction.
8. Phase transfer catalysis in ester and epoxide formation.
9. Effect of structure on reactivity.
10. Inductive and electromeric effect.

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