

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)  
PCI Regulation 2017 – SEMESTER II  
PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY I

*Q.P. Code: 562016*

**Time: Three hours**

**Maximum: 75 Marks**

**I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)**

1. Define Elimination reaction. Discuss the E<sub>1</sub> and E<sub>2</sub> reaction mechanism with suitable examples.
2. Explain the general methods of preparation and chemical reactions of Amines.
3. Classify alcohols. Explain the nomenclature and method of preparation of Alcohols.

**II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)**

1. Explain Anti-Markownikoff's orientation mechanism with example.
2. Describe the reaction mechanism of Perkin condensation and mention its applications.
3. Summarize about the SP<sup>3</sup> hybridization in Alkanes.
4. Explain the Diels-alder reaction with its reaction mechanism.
5. Discuss the effect of Substituents on acidity of carboxylic acid.
6. Outline the general methods of Preparation of Ketones.
7. Illustrate the Cannizzaro reaction and crossed Cannizzaro reaction with mechanism.
8. Describe about SN1 versus SN2 reactions.
9. Classify Organic compounds based on its functional group.

**III. Short answers on: Answer ALL questions. (10 x 2 = 20)**

1. Define Markownikoff's rule.
2. Write any two methods of preparation of Aldehyde.
3. Sketch the structure and uses of oxalic acid and Hexamine.
4. Mention the structural formula, IUPAC name and uses of Lactic acid.
5. How will you differentiate Aldehyde from Ketone?
6. Recall the structure and medicinal uses of Methyl salicylate and Propylene glycol.
7. What are Dienes? Give examples.
8. State Lucas test.
9. Sketch the structure of Dimethyl phthalate and Ethylenediamine.
10. What is Aldol condensation?

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