

**B. PHARMACY FIRST YEAR SECOND SEMESTER - 2024**

**PHARM. CHEM - I (ORGANIC - I)**

Time : Three hours

Full Marks : 100

Answer any five questions

1. Discuss Clemmensen Reduction and Dieckman Reaction for the preparation of cycloalkanes.  
Write a short note on Bayer Strain theory of cycloalkanes [10+10]
2. Write about the conformation of cyclohexane. Describe the electrophilic substitution reaction of Naphthalene. [10+10]
3. How do you prepare alkanes? Explain with different examples. Write also about the conformation of alkanes [15+5]
4. Write about the method of preparation of carboxylic acid and its reaction by taking various examples. [10+10]
5. Write short notes on (a) Haworth synthesis of Naphthalene (b) Acidity of carboxylic acid (c) reaction of an alkene with  $\text{KMnO}_4$  (d)  $sp^3$ ,  $sp^2$ ,  $sp$  hybridization of carbon [5x4]
6. How do you prepare different alcohols? Discuss common reactions of alcohol with examples. [10+10]
7. What are diazonium salts? How do you prepare diazonium salts? Discuss its various reactions [4+8+8]