

PHARMACEUTICAL CHEMISTRY - II

(Organic Chemistry)

(2010 - Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Explain free radical substitution of reaction of alkanes
2. State Markonikoff's rule and explain with suitable examples
3. Explain electrophilic aromatic substitution reaction with theory of reactivity and orientation in mono substituted benzenes.

Short notes

(14x5=70)

4. Explain hyperconjugation and inductive effect
5. Basicity of amines
6. Mention two methods for preparation of carbonyl compounds. Add a note on its polarity and reactivity
7. Mechanism of E₁ and E₂ reaction
8. Hoffmann's degradation of amides
9. Explain Oppenauer oxidation and reformatsky reaction
10. Saytzeff's rule
11. Kekule's structure of benzene
12. SP³ and SP² hybridisation
13. Explain the relative reactivities of three classes of alcohols
14. Two methods for the synthesis of nitriles and explain its reactivity
15. Acid derivatives
16. Stability of phenoxide ion
17. Define bond angle, bond energy and electrophile
