

First Year Pharm D Degree Examinations - July 2015

Pharmaceutical Organic Chemistry

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Write equation wherever necessary.

Essay

(3x10=30)

1. Explain the electrophilic aromatic substitution reactions of benzene emphasizing the mechanism involved.
2. Explain in detail about the Bayer`s strain theory and its limitations.
3. Discuss briefly about the mechanism of SN₁ and SN₂ reactions with suitable example.

Short notes:

(8x5=40)

4. Basicity of amines.
5. Explain Reimer -Tiemann reaction and Fries rearrangement.
6. Halogenation of methanes with mechanism.
7. Mention the preparation, assay and uses of urea and citric acid.
8. Mechanism involved in Perkin`s condensation.
9. Polar and non-polar bonds.
10. Explain Diel`s alder reaction with mechanism.
11. What are activating and deactivating groups. Explain how halogens affect the reactivity of benzene towards electrophilic substitution.
