

First Year Pharm D Degree Examinations - August 2014

Pharmaceutical Organic Chemistry

Time: 3 Hours

Total Marks: 70

- Answer all Questions.
- Write equation wherever necessary.

Essay

(3x10=30)

1. Explain the mechanism, reactivity and stability of free radical chain reaction of alkanes.
2. Briefly narrate the following:
 - Lewis acid –base theory-Bronsted-Lowry concept.
 - Theory of resonance.
3. Explain the following reaction with mechanism and its synthetic importance:
 - Hoffmann rearrangement.
 - Perkin condensation.

Short notes:

(8x5=40)

4. Compare and contrast SN_1 versus SN_2 .
5. General nomenclature of alcohols and phenols.
6. Protic and aprotic solvents
7. Explain briefly about diazotization and coupling reaction.
8. Explain the cannizaro reaction with mechanism.
9. Mention the structure, chemical name and uses of vanillin and citric acid
10. Explain briefly about activating and deactivating groups.
11. Explain the reaction mechanism of Kolbe's reaction and Sand Meyer's reaction.
