## **QP CODE:104326**

First Year Pharm D Degree Supplementary Examinations - January 2016

## **Pharmaceutical Organic Chemistry**

## **Time: 3 Hours**

- Answer all Questions.
- Write equation wherever necessary. •

### Essay

1. Describe the reaction and explain the mechanism involved in the nitration of bromobenzene. Predict the major products obtain from the above reaction and

justify your answer.

- 2. Mention any three addition reactions of alkenes with equations taking propene as an example. Explain mechanism of any one of them.
- Describe the method of preparation, principle involved in the assay and medicinal uses of the chlorbutol and glycerine trinitrate

#### Short notes:

- 4. Write a note on intermolecular forces
- 5. Mechanism, kinetics and stereochemistry involved in SN<sub>2</sub> reactions.
- 6. Mention any three methods of preparation of cycloalkanes.
- 7. Explain the dehydration of alcohol with mechanism by taking an example.
- 8. Mention the reaction along with mechanism involved in benzoin condensation.
- 9. Explain 1,2 addition Vs 1,4 addition of conjugated dienes.
- 10. Stability of carbocations.
- 11. How will you convert carboxylic acids to amides and esters.

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# **Total Marks: 70**

(3x10=30)

#### (8x5=40)