

QP CODE: 104326

Reg. No:.....

First Year Pharm D Degree Supplementary Examinations - March 2013

Pharmaceutical Organic Chemistry

Time: 3 Hours

Total Marks: 70

- **Answer all questions**
- **Write equations, draw diagrams wherever necessary**

Essays: (2x10=20)

1. Discuss the mechanism and orientation of electrophilic aromatic substitution.
2. What is diazonium salt. Mention the preparation and uses in the synthesis of organic compounds.

Short Notes: (10x3=30)

3. Explain perkin's condensation with mechanism.
4. Basicity of amines.
5. Preparation, assay and use of saccharin sodium.
6. Explain the mechanism of E1 and E2 reaction.
7. What is Markowknikov's rule and explain with an example
8. Explain the mechanism of free radical addition reaction.
9. What is carbocation. Discuss their stability.
10. Stereochemistry of SN1 and SN2 reaction.
11. Propose a mechanism for the reaction of acid chlorides with benzene in the presence of aluminium chloride catalyst.
12. Resonance stabilization of benzyl radical.

Answer briefly : (10x2=20)

13. Explain Sandmeyer's reaction.
14. Mention a reaction with equation of conversion of acid to acid chloride and esters.
15. Explain the structure of ethylene.
16. What are conjugated dienes and how are they prepared.
17. Explain Williamson's synthesis.
18. Mention the preparation and medicinal use of mephenesin .
19. Hyper conjugation.
20. Explain Kolbe reaction.
21. .List any two reactions common to aldehydes and ketones.
22. Preparation and use of benzyl benzoate .
