## First B.Pharm (Ayurveda) Degree Examinations, October 2013

## PHARMACEUTICAL CHEMISTRY

Time: 3 hrs Max marks: 100

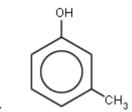
- Answer all questions
- Write equations wherever necessary
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Discuss in detail the kekule structure of benzene, giving arguments for and against its validity.
- 2. Explain the general method of preparation and reactions of alkyl halides.

Short notes (10x5=50)

- 3. sp2 hybridization.
- 4. Mention the IUPAC and common naming of following compounds
  - $(CH_3)_2CO$



- ❖ CH3COCI
- ❖ CH3 CHO
- ❖ CH3COOCH2CH3
- 5. Friedel-crafts alkylation reaction of benzene.
- 6. Discuss IUPAC rules.
- 7. What is Kharash peroxide effect.
- 8. Explain about the applications of I.R spectroscopic analysis.
- 9. Polarity in covalent bonds.
- 10. Cannizzaro reaction.
- 11. Explain the decarbxylation reaction of carboxylic acid.
- 12. How are phenols named. Mention the systematic and common names of any three structures.

Answer briefly (10x3=30)

- 13. Define bond angle and bond length.
- 14. Note on electrophiles.
- 15. Uses of NMR spectra.
- 16. What is tollen's reagent.
- 17. Aldehydes are more reactive than ketones towards nucleophiles. Why.
- 18. Note on ionic bond.
- 19. Mention the uses of cyclopropane.
- 20. Distinguish between primary, secondary and tertiary amines.
- 21. Mention the Dewar structures of benzene.
- 22. Explain about inductive effect.

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