First B.Pharm (Ayurveda) Degree Examinations October 2017

PHARMACEUTICAL CHEMISTRY

Time: 3 hrs Max marks: 100

- A nswer all questions
- Write equations wherever necessary
- Draw diagrams wherever necessary

Essays (2x10=20)

- Discuss the effect of substituents on electrophilic aromatic substitution reaction and why chloro group in ortho and para directing
- 2. Explain free radical substitution reaction of alkanes in detail

Short notes (10x5=50)

- 3. Explain cannizzaro reaction with mechanism
- 4. Explain briefly about SN₁ and SN₂ reaction
- 5. Kharasch effect
- 6. General method of preparation of alkenes
- 7. Structure of benzene and its aromaticity
- 8. Chemical reactions of carbonyl compounds
- 9. Principle and chemical reactions involved in the limit test for iron
- 10. Explain the acidity of carboxylic acid
- 11. Diazotization reaction
- 12. Explain elimination reaction of alkyl halides

Answer briefly (10x3=30)

- 13. What are activators and deactivators in electrophilic aromatic substitution and give the reason
- 14. Any three identification tests for carboxylic acids
- 15. Explain about inductive effect with examples
- 16. Sachse-Mohr theory
- 17. Huckel's rule
- 18. The relative reactivity of primary, secondary and tertiary alcohols
- 19. Dicarboxylic acids
- 20. Application of NMR spectroscopy
- 21. How will you prepare borax
- 22. IUPAC nomenclature of alcohol
