Pharmaceutical Organic Chemistry - II

(2017 Scheme)

Time: 3 Hours Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers •

- Indicate the question number correctly for the answer in the margin space Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays

- 1. Explain the effect of substituents on the reactivity and orientation in benzene.
- 2. Discuss the stability of cycloalkanes on the basis of Baeyer's strain theory. Add a note on its limitations.

Short Notes

- Write the reactions of cyclobutane
- 4. Explain the mechanism involved in the nitration of benzene
- 5. Explain Haworth synthesis of naphthalene. Write any three reactions of naphthalene
- 6. What is iodine value. Write the principle involved in the estimation of iodine value
- 7. How are any diazonium salts formed. Write any three applications of any diazonium salts
- 8. Explain the effect of substituents on the acidity of phenols
- 9. Write any two methods of preparation and any three reactions of aromatic amines

Answer Briefly

- 10. Friedal Craft's alkylation reaction. What is its limitation
- 11. Define resonance energy
- 12. Write the structure and use of (a) cresol (b) saccharin
- 13. Write the structure and use of any two medicinal compounds containing phenanthrene nucleus
- 14. Reimer Tiemann reaction
- 15. What are fused polynuclear hydrocarbons. Give examples
- 16. Reichert Meissl number
- 17. Write any two electrophilic substitution reactions of phenols
- 18. Sache-Mohr theory
- 19. Calculate the angle strain for (a) Cyclobutane (b) Cyclopentane

(7x5=35)

(10x2=20)

(2x10=20)

Max. Marks: 75

Reg. No.....