

QP Code: 321006

Reg. No.....

**Third Semester B. Pharm Degree Regular/Supplementary Examinations
October 2022**

Pharmaceutical Organic Chemistry - II

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *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

(2x10=20)

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

(7x5=35)

3. 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 aryl diazonium salts formed. Write any three applications of aryl 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

(10x2=20)

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
