Rajiv Gandhi University of Health Sciences, Karnataka

Third Semester B. Pharm Degree Examination – 10-Nov-2021

Time: Three Hours **Max. Marks: 75 Marks**

Pharmaceutical Organic Chemistry - II
Q.P. CODE: 5009

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
All the questions are compulsory

LONG ESSAYS **2 x 10 = 20 Marks**

1. Define electrophilic substitution reaction? Explain mechanism of nitration and sulphonation of benzene

OR

a. Write any three chemical reactions of benzoic acid.
b. Explain the acidity and effect of substituents on acidity of phenols.

2. a. Explain drying, semidrying and non-drying oils with examples.
b. Explain principle involved in any one method of determination of iodine value. Give its significance.

SHORT ESSAYS **7 x 5 = 35 Marks**

3. Explain the reactivity and orientation of aniline towards electrophilic aromatic substitution reaction

OR

Explain the friedelcraft's alkylation of benzene with limitations

4. Explain the effect of substituents on basicity of aromatic amines

OR

Explain the aromatic character and resonance structure of benzene

5. Explain any one method to determine saponification value with its significance.
6. Outline any two synthesis and reactions of phenantharene
7. Write any two synthesis and reaction of naphthalene.
8. Define angle strain. Explain why higher cycloalkanes are more stable than lower members.
9. Outline two reactions each of cyclopropane and cyclobutane.

SHORT ANSWERS **10 x 2 = 20 Marks**

10. Write structure and uses of saccharin and BHC.
11. Define activating and deactivating groups with examples.
12. Write the structure and uses of phenol and resorcinol.
13. Explain synthetic uses of aryl diazonium salts.
14. Define rancidity. Give its significance.
15. Define ester value. Give its significance.
16. What is Huckel's rule? Give its significance.
17. What is friedelcraft's acylation?
18. Write structure and uses of Medicinal uses of diphenyl methane.
19. Define sache-moore theory.

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