THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 2031) SEPTEMBER 2019 **Sub. Code: 2031**

B.PHARM. DEGREE EXAMINATION
PCI REGULATION – SEMESTER III
SECOND YEAR
PAPER I – PHARMACEUTICAL ORGANIC CHEMISTRY – II

Q.P. Code: 562031

Time: Three hours **Maximum: 75 Marks**

I. Elaborate on: Answer any TWO questions. **(2 x 10 = 20)**

1. Explain the facts which supporting Kekule structure of Benzene. Briefly discuss about activating and deactivating group in Benzene.
2. Write the general method of preparations and reactions of aromatic amines.
3. a. Explain the various reactions of Fatty acids
   b. Determination of Iodine value with its significance.

II. Write notes on: Answer any SEVEN questions. **(7 x 5 = 35)**

1. Describe the effect of substituent of Benzene.
2. Explain any three method for preparation of Phenol.
3. Write a detailed note on Basicity of amines.
4. Write briefly on acidity and effect of substituents of Aromatic acids.
5. Explain the determination of acid value with its significance.
6. What happens when Naphthalene?
   a. Reduce with H_2/Ni
   b. Oxidise with $KMnO_4$
   c. Addition of excess Cl_2
   d. With Con.HNO_3 and Con.H_2SO_4
   e. With Con.H_2SO_4 at 40°C.
7. Explain the Haworth synthesis for Naphthalene.
8. Describe about Coulson and Moffitt's modification.
9. Explain any two reactions of each of Cyclopropane and Cyclobutane.

III. Short answers on: Answer ALL questions. **(10 x 2 = 20)**

1. Two synthetic utility of diazonium salt.
2. Write any two Qualitative tests for Phenol.
3. Preparation of Biphenyl from Benzidine.
4. Classify polynuclear hydrocarbons.
5. What do you mean Essential fatty acid? Give the examples.
6. Give structure and common name of two fatty acid.
7. Explain Williamson's ether synthesis.

Give the structure and uses of the following:

8. a) DDT b) Saccharin
9. a) *p*-cresol b) 1-Naphthol
10. a) Picric acid b) Diphenylmethane

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