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Total No. of Pages : 02

Total No. of Questions : 22

**B.Pharma (2017 & Onward) (Sem.-3)**  
**PHARMACEUTICAL ORGANIC CHEMISTRY-II**  
Subject Code : BP-301T  
M.Code : 75105

Time : 3 Hrs.

Max. Marks : 75

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.
3. SECTION-C contains NINE questions carrying FIVE marks each and students have to attempt any SEVEN questions.

**SECTION-A**

**Answer briefly :**

1. Give the structure of Tritane.
2. How can you identify the presence of phenol in an organic mixture?
3. Why benzoic acid is less acidic than formic acid but more acidic than acetic acid?
4. Write the structure of various types of cresols.
5. Write any two reactions of cyclopropane.
6. What is Sandmeyer reaction?
7. Define iodine value.
8. Convert nitrobenzene to 1, 3, 5-Tribromobenzene.
9. What is Birch reduction reaction?
10. Give an example of oxidation reaction of anthracene.

### SECTION-B

11. Discuss in detail various analytical and synthetic evidences used for the derivation of structure of benzene.
12. Comment upon :
  - a) Theory of strainless rings
  - b) Reichert Meissl value and its significance
13. What are Aryl Diazonium compounds? Justify their stability in comparison to alky diazonium salts and enumerate various synthetic uses of benzene diazonium salt.

### SECTION-C

14. Explain why nitrobenzene when nitrated further gives m-dinitrobenzene.
15. Write the structure and uses of DDT and Saccharin.
16. Give the detailed mechanism of Reimer teimann reaction.
17. Comment upon the effect of substituent on acidity of aromatic carboxylic acids.
18. Write a short note on rancidity and drying of oils. How can these be prevented?
19. Give various methods utilized for the synthesis of naphthalene.
20. Classify polynuclear hydrocarbons. Give the structure of the compounds belonging to each class.
21. Comment upon various methods of preparation and reactions of cyclobutane.
22. Write down the detailed mechanism of Friedel craft reaction of benzene.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**