

PARUL UNIVERSITY
FACULTY OF PHARMACY
B. Pharm. Winter 2022 - 23 Examination

Semester: 3
Subject Code: BP301T
Subject Name: Pharmaceutical Organic Chemistry II

Date: 10/10/2022
Time: 10:00am-1:00 pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions (MCQs) (1 Mark Each) (20)

1. Huckel's Rule is used in order to estimate the aromatic qualities of any planar ring-shaped molecule in the field of
 - a) Inorganic chemistry
 - b) Organic chemistry
 - c) Analytical chemistry
 - d) Physical Chemistry
2. Strongly activating substituents such as NH_2 , $-\text{NHR}$, $-\text{NR}_2$, $-\text{OR}$, and $-\text{OH}$ make the benzene ring _____ toward electrophilic substitution
 - a) less reactive
 - b) more reactive
 - c) moderately active
 - d) activate
3. The reagent which is used to generate nitronium ion from HNO_3
 - a) FeCl_3
 - b) NaOH
 - c) K_2CO_3
 - d) H_2SO_4
4. CCl_3COOH is the strongest of
 - a) Acids
 - b) Bases
 - c) Alkali
 - d) compounds
5. Arylamines are less basic than alkylamines due to
 - a) lone pair of C is delocalised
 - b) electron density on C atom
 - c) lone pair of N is delocalised
 - d) electron density on N atom
6. Conversion of benzoic acid to benzoyl chloride possible by which reagent?
 - a) PCl_5
 - b) SOCl_2
 - c) Oxylyl chloride
 - d) All of the above
7. The iodine value of fat is
 - a) milligrams of iodine bound to one gram of fat
 - b) milligrams of iodine bound to one mole of fat Organic chemistry
 - c) milligrams of iodine bound to 10 grams of fat
 - d) number of grams of iodine absorbed by 100 grams of fat
8. The number of $-\text{OH}$ groups in fats can be expressed as:
 - a) Reichert-Meissel number
 - b) Polenske value
 - c) Iodine Value
 - d) Acetyl Value
9. Fats and oils are:
 - a) Diesters of glycerol
 - b) Triesters of glycerol
 - c) Diesters of glycol
 - d) Triesters of glycol
10. The following compound is formed when anthracene is treated with sodium in ethanol
 - a) 1,4-dihydroanthracene
 - b) 5,8-dihydroanthracene
 - c) 9,10-dihydroanthracene
 - d) 1,3,4-tetrahydroanthracene
11. Naphthalene + Sulphuric acid (80°C) \rightarrow ? + NaOH \rightarrow ?
 - a) Naphthalene-1- sulphonic acid, 1- Naphthol
 - b) Naphthalene-1- sulphonic acid, 2- Naphthol
 - c) Naphthalene-2- sulphonic acid, 1- Naphthol
 - d) Naphthalene-2- sulphonic acid, 2- Naphthol
12. According to Baeyer's strain theory which is highly stable
 - a) cyclobutene
 - b) cyclopentane
 - c) cyclohexane
 - d) cycloheptane

