# BHARATI VIDYAPEETH'S COLLEGE OF PHARMACY

# Sector-8, CBD Belapur, Navi Mumbai

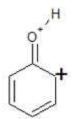
# **Sample Questions (MCQs)**

# S. Y. B. Pharm. Sem-III R-2019

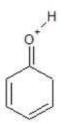
# **Subject: BP301T- Pharmaceutical Organic Chemistry-II (Theory)**

# Q. 1. Which of the following is the resonance structure of phenol?

A]



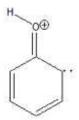
B]



C]



D]



# Q. 2 What is the increasing order of acidity benzoic acid, p-nitro benzoic acid, p-methyl benzoic acid?

A] benzoic acid< p-nitro benzoic acid<p-methyl benzoic acid

B] p-methyl benzoic acid<br/>benzoic acid<p-nitro benzoic acid

C] p-methyl benzoic acid<p-nitro benzoic acid<br/>
denzoic acid

D] p-nitro benzoic acid<p-methyl benzoic acid<benzoic acid

#### Q. 3 Which of the following will be the most basic compound?

A] p-nitro aniline

B] N,N-dimethyl aniline

C] N-methyl aniline

D] Aniline

#### Q.4 Acetic acid is more acidic than phenol because,

A] Acetic acid shows symmetrical resonance structures whereas phenol does not show symmetrical resonance structures

B] Acetic acid shows more resonance structures whereas phenol shows less resonance structures

C] Acetic acid is water soluble whereas phenol is water insoluble

D] Acetic acid has low molecular weight whereas phenol has high molecular weight

#### Q.5 Identify the product of the following reaction

A] R substituted benzoic acid

B] R substituted iodo benzene

C] R substituted ethyl benzene

D] R substituted benzene ethanol

#### Q.6 Identify the reactant for the following reaction

- A] ethanol
- B] ethyl chloride
- C] acetyl chloride
- D] Sulfuric acid

### Q. 7 After hydrolysis of triglyceride which of the following products are formed?

- A] Glycerine
- B] Glycerol and 3 molecules of fatty acids
- C] Glycerol and two molecules of fatty acids
- D] Glyceraldehyde and three molecules of fats

#### Q. 8 How many resonance structures are seen for Anthracene?

- A] 2
- B] 3
- C] 4
- D] 5

# Q. 9 Which starting materials are used in Elbe's reaction

- A] O-methyl acetophenone
- B] P-methyl acetophenone
- C] O-methyl benzophenone
- D] P-methyl benzophenone

#### Q.10 Identify the product for the following reaction

- A] Benzene
- B] Naphthalene
- C] Anthracene
- D] Phenanthrene

### Q. 11 Which of the following reducing agent yields 1,4-dialine from naphthalene?

- A] Sodium and ethanol
- B] Sodium and isopropanol
- C] Sodium and isopentanol
- D] Hydrogen and Platinum

#### Q. 12 Which of the following is obtained after complete hydrogenation of Fatty acid?

- A] Partially saturated fatty acid
- B] Fully saturated fatty acid
- C] Completely unsaturated fatty acid
- D] Completely saturated glecerol

#### Q,13 Mg of KOH requird to neutralise free faty acid from 1 gm of oil is known as

- A] Acid value
- B] Saponification value
- C] Acetyl value
- D] Iodine number

# Q. 14 The given compound is



- A] Aromatic
- B] Anti-aromatic
- C] Non aromatic
- D] Aliphatic

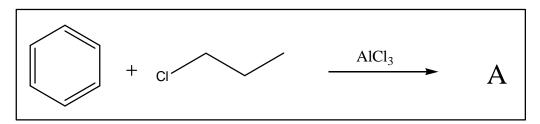
# Q. 15 The following given reactions are electrophilic aromatic substitution reactions except...

- A] Nitration
- B] Chlorination
- C] Reduction
- D] Sulphonation

# Q. 16 Identify the meta director group from the following given examples

- A] CHO
- B] CH<sub>3</sub>
- C] OH
- D] OC<sub>2</sub>H<sub>5</sub>

#### Q. 17 Identify the compound A in the given reaction



D]

B]

# Q. 18 Identify the product B in the following reaction

# Q. 19 Select correct structure of Saccharin

#### Q. 20 Select most acidic compound

- A] 2, 4-dinitrophenol
- B] 4-Chloro phenol
- C] Phenol
- D] 2, 4, 6-trinitrophenol

# Q.21 What is Reimer Tiemann reaction?

- A] Conversion of resorcinol to 2-hydroxy benzaldehyde
- B] Conversion of phenol to 2-hydroxy benzaldehyde
- C] Conversion of phenol to 3-hydroxy benzaldehyde
- D] Conversion of phenol to Salicylic acid

# Q.22 Identify the compound Z in the given reaction

$$Z = \frac{1.02,60-80^{0}C}{2.H_{2}SO_{4}} + H_{3}C + CH_{3}$$

$$A]$$

$$B]$$

A] Angle strain

D]

- B] Stearic strain
- C] Baeyer's strain
- D] Torsional strain

#### Q.24 Select the correct statement for the stability of cyclohexane

- A ]Boat conformation of cyclohexane is more stable than chair conformation
- B] Both chair and boat conformations of cyclohexane are equally stable
- C] Chair conformation of cyclohexane is more stable than the boat conformation
- D] In the boat conformation, the adjacent C H bonds on all the neighbouring carbon atoms are staggered.

#### Q. 25 Select the wrong statement for Baeyer's theory

- A] All ring systems are planer
- B] The large ring system do not exist due to positive strain
- C] Any deviation from ideal bond angle value produces strain in a molecule
- D] Cyclopropane and cyclobutane undergo ring opening reactions easily due to higher angle strain