University of Mumbai Semester Theory Examination Second Half 2020 Question Bank Section I: Multiple Choice Question (MCQ's)

Year/Semester: S.Y. B. Pharm./III Subject: Pharmaceutical Organic Chemistry II Subject Code: BP301T

- 1. Identify deactivating and meta directing group
 - a. Phenyl
 - b. Aldehyde
 - c. Alkoxy
 - d. Amine
- 2. Electrophile in Friedel Craft's Acylation is
 - a. R^+
 - b. RCO^+
 - c. RC⁺
 - d. R⁻

3. Identify the regent to convert amines into amides

- a. RX
- b. Acetic acid
- c. Sulphonyl chloride
- d. Benzoyl chloride
- 4. Benzoic acid can be converted to m-nitrobenzoic acid by
 - a. Nitric acid
 - b. Nitric acid +Sulphuric acid
 - c. Sulphuric acid
 - d. Nitrous acid
- 5. Iodination of fatty acids can be done by
 - a. Potassium iodide
 - b. Potassium hydroxide
 - c. IBr
 - d. Potassium permagnet
- 6. Friedel crafts alkylation in naphthalene takes place at C-2 position due to
 - a. Formation of stable resonating structure
 - b. Stable hybrid structure
 - c. Less kinetic energy
 - d. No hindrance effects

- 7. Naphthalene on nitration results in to
 - a. 2- Nitro naphthalene
 - b. 1-Nitro naphthalene
 - c. 4- Nito naphthalene
 - d. 3- Nitro naphthalene
 - 8. Starting material for synthesis of naphthalene by Howarth method's is
 - a. Benzene
 - b. Toluene
 - c. Aniline
 - d. Nitrobenzene
- 9. The cyclopropane is basically
 - a. Planar in nature
 - b. Non planar in nature
 - c. Axial in plane
 - d. Perpendicular to plane

10. Addition of HBr to 1,1-dimethylcyclopropane gives

- a. 2-Bromo-2-methyl butane
- b. 2-Bromo butane
- c. 3-Bromo butane
- d. 4-Bromobutane

11. What will the product formed when benzene reacts with Br₂ in CCl₄ medium?

- a. 3-Bromophenol
- b. 4-Bromophenol
- c. 3,5-Dibromophenol
- d. No reaction

12. Identify the product of reaction between benzene and acetyl chloride

- a. Benzyl acetate
- b. Ethylbenzene
- c. Ethyl benzyl ketone
- d. Benzylethane

13. Phenol upon reacting with chloroform and aqueous NaOH gives

- a. o- Hydroxy benzaldehyde
- b. p-Hydroxy benzaldehyde
- c. o,p-Dihydroxy benzaldehyde
- d. m,p-Dihydroxy benzaldehyde

14. o-Phenol sulphonic acid formation can be carried out at

- a. 15-20° C
- b. 35-50° C
- c. 100° C
- d. 200° C

- 15. Pthalic anhydride can be synthesize by using naphthalene and
 - a. Vanadium pentaoxide and air at 475^oC
 - b. KMnO₄
 - c. NaOH
 - d. KOH
- 16. Torsinal strain is also known as
 - a. Angular strain
 - b. Molecular strain
 - c. Eclipsing strain
 - d. Atomic strain
- 17. Bromination of 4- methyl acetanilide results in formation of
- a. 2-Bromo-4 methyl acetanilide
- b. 3-Bromo-4 methyl acetanilide
- c. 5-Bromo-4 methyl acetanilide
- d. 2,3-Dibromo-4 methyl acetanilide
- 18. Oxidation of methylbenzene results in
 - a. Phenol
 - b. Benzoic acid
 - c. Benzyl formate
 - d. Methyl benzoate
- 19. The strength of KOH required for determining Polenske's number is
 - a. N/10 KOH
 - b. N/5 KOH
 - c. N/100 KOH
 - d. N/2 KOH

20. 1-Nitronaphthalene on oxidation with KMnO4 gives

- a. Pthalic acid
- b. 3-Nitro pthalic acid
- c. Picolic acid
- d. 2- Naphthol