

# University of Mumbai

## Semester Theory Examination Second Half 2020

Year/Semester: T.Y.Bharm./Sem-V

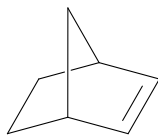
Subject: Organic chemistry-III

Subject Code: BPH\_C\_501\_T

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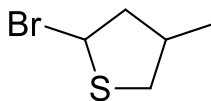
1. Which heterocycles is not an example of fused heterocycle?
  - a. Quinoline
  - b. Acridine
  - c. Phenothiazine
  - d. Pyrimidine
2. Reaction of thiophene with n-BuLi in ether gives
  - a. Thiophene-2-carboxylic acid
  - b. Thiazole-1-carboxylic acid
  - c. Thiophene-3-carboxylic acid
  - d. Thiole-2-carboxylic acid
3. Synthesis of quinoline derivative by reacting quinoline with NaNH<sub>2</sub> in liquid ammonia is known as?
  - A. Chichibabin reaction
  - B. The Pictet Method
  - C. The Conrad-Limpach synthesis
  - D. The Friendlander synthesis
4. Treating malonic ester with urea in presence of base gives?
  - a. Pyridine derivatives
  - b. Pyrimidine derivatives
  - c. Furan
  - d. Imidazole
5. Oxidation of isoquinoline with alkaline KMnO<sub>4</sub> gives largely?
  - a. Pthalic acid
  - b. Acetamide
  - c. Isoindoline-1,3-dione

- d. Isoquinoline-1,3-dione
6. Isoelectric point is designated
- IP
  - Iso-P
  - PI
  - II-P
7. Polymers derived from more than one species of monomer is referred as \_\_\_\_\_?:
- Co-enzyme
  - Co-polymers
  - Co-ordinate
  - Co-solvency
8. Polycot is made by mixing two types of fibers namely:
- Silk and Cotton
  - Polythene and Cotton.
  - Polyester Cotton
  - Silk and Polyester.
9. Catalytic hydrogenation of pyridine gives?
- Isoquinoline
  - Qinoline
  - Morpholine
  - Piperidine
10. Preparation of  $\alpha$ -amino nitrile is an example of
- Strecker synthesis
  - Reductive amination
  - Amidomalanoate synthesis
  - Amino acid synthesis
11. Identify the correct IUPAC name for the given structure



- a. Bicyclo [2.2.2] hep-2-ene
- b. Bicyclo [2.2.1] hep-2-ene
- c. Bicyclo [2.1.1] hep-2-ene
- d. Bicyclo [2.2.1] heptanes

12. Identify the correct IUPAC name for the given structure



- a. 2-bromo-4-methyl-thiolane
- b. 5-bromo-3-methyl-thiolane
- c. 5-bromo-3-methyl-thiophene
- d. 5-bromo-3-methyl-thiole

13. Reacting malonic ester with urea in presence of a base gives?

- a. Pyrimidine derivatives
- b. Pyridine derivatives
- c. Isoquinoline
- d. Quinoline

14. Which among the following material can be used to synthesize piperazine?

- a. 2-aminoethanols with sulphuric acid
- b. 2-aminoethan-1-ol with ammonia
- c. Oxirane with ethylenediamine
- d. Morpholine with Raney Nickel

15. Among the given options which is not thermosetting plastic

- a. Bakelite
- b. Melamine
- c. Silicon
- d. Terylene

16. Which of the following is not poly amide?

- a. Nylon-66
- b. Protein

- c. Nylon-6
  - d. Alkyl resin of glycol
17. Which starting material will give 2-unsubstituted imidazole
- a. Glyoxal
  - b. Benzil
  - c.  $\alpha$ -dicarbonyl compound
  - d.  $\alpha$ -haloketone compound
18. Reaction between a formaldehyde, ethyl acetoacetate and ammonium acetate or ammonia is referred as?
- a. Pall-knorr synthesis
  - b. Chichibabin Reaction
  - c. Pinacole-pinacolone rearrangement
  - d. Hantzsch synthesis
19. Bromination of  $\alpha$ -keto steroid such as  $5\alpha$ -cholestane-3-one.
- a. 4-bromo derivatives
  - b. 2-bromo derivatives
  - c. 2,4-dibromo derivative
  - d. Mixture of 2 and 4-bromo derivatives
20. A polymer is large molecule composed of many repeated units. What is polystyrene composed of ?
- a. Cellulose
  - b. Amino acid
  - c. Ether
  - d. Ester