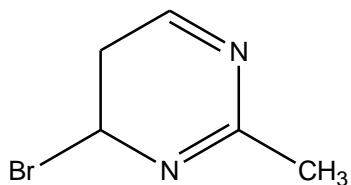


SAMPLE QUESTIONS
Third Year B. Pharm. Sem-V
ORGANIC CHEMISTRY III - CBCS SYLLABUS

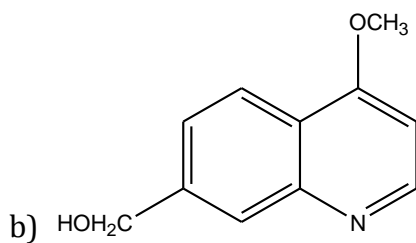
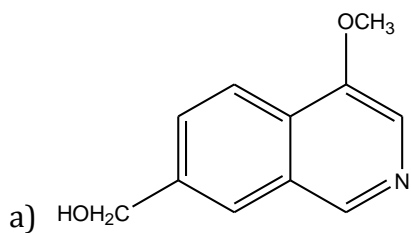
Q. 1 Select correct IUPAC name of the following structure

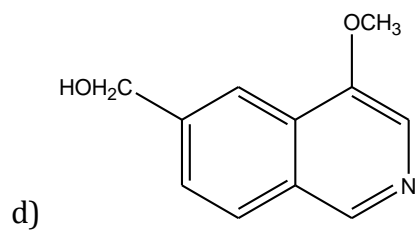
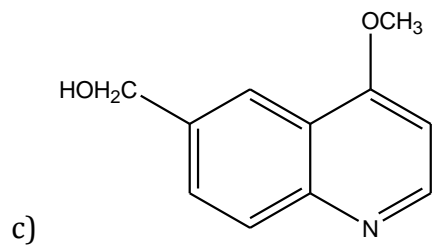


- a) 4-Bromo-2-methyl-pyrimidine
- b) 4-Bromo-2-methyl-4,5-dihydro-pyrimidine
- c) 6-Bromo-2-methyl-5,6-dihydro-pyrimidine
- d) 4-Bromo-2-methyl-4,5-dihydro-pyridine

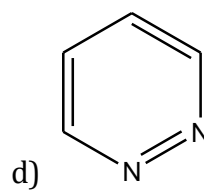
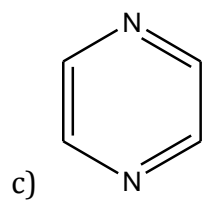
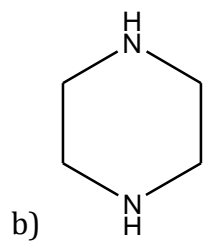
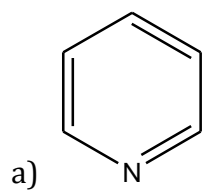
Q.2 Select the correct structure from given IUPAC name-

7-Hydroxymethyl-4-methoxy isoquinoline





Q.3 Identify the structure of pyrazine



Q.4 Which compound is not heteroaromatic?

- a) Furan
- b) Indole
- c) Quinoline
- d) Piperidine

Q.5 Paal-Knorr synthesis of thiophene involves...

- a) Reaction of 1,4-dicarbonyl compound and phosphorus pentachloride
- b) Reaction of 1,4- diamino compound and phosphorus pentasulfide
- c) Reaction of 1,4- dicarbonyl compound and phosphorus pentasulfide
- d) Reaction of 1,5- dicarbonyl compound and phosphorus pentasulfide

Q.6 In Pyrrole electrophilic aromatic substitution reaction takes place at which position?

- a) First
- b) Second
- c) Third
- d) Does not occur

Q.7 Which is more basic among Pyrrole, thiophene and Furan?

- a) Furan
- b) Pyrrole
- c) Thiophene
- d) All are equally basic

Q.8 Amidine and 1,3-diketone is used for the synthesis of...

- a) Pyridine
- b) Quinoline
- c) Imidazole
- d) Pyrimidine

Q.9 Under vigorous condition bromination of pyridine yields...

- a) 1-Bromopyridine
- b) 2-Bromopyridine
- c) 3-Bromopyridine
- d) 4-Bromopyridine

Q.10 Nitration of imidazole gives..

- a) 4-Nitroimidazole
- b) 3-Nitroimidazole
- c) 1-Nitroimidazole
- d) 2-Nitroimidazole

Q. 11 The octapeptide angiotensin II has the sequence

Asp-Arg-Val-Tyr-Ile-His-Pro-Phe. What fragments would result if angiotensin II were cleaved with trypsin

- a) Asp-Arg-Val and Tyr-Ile-His-Pro-Phe
- b) Asp and Arg-Val-Tyr-Ile-His-Pro-Phe
- c) Asp-Arg and Val-Tyr-Ile-His-Pro-Phe
- d) Asp-Arg-Val-Tyr-Ile-His and Pro-Phe

Q. 12 The pK_a values for Aspartic acid are pK_{a1} 1.9, pK_{a2} 9.6 and pK_{a3} 3.6. What will be the isoelectric point?

- a) 4.7
- b) 3.7
- c) 2.7
- d) 1.7

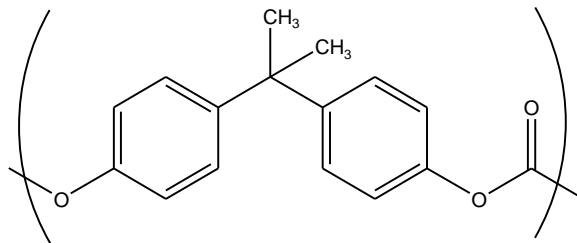
Q. 13 Following are the amino protecting groups except

- a) ter-butoxycarbonyl
- b) benzyloxycarbonyl
- c) flurenylmethylcarbonyl
- d) benzyl esters

Q.14 The monomeric units from which Saran is made are

- a) Vinyl chloride Vinylidene chloride
- b) Styrene 1,3-Butadiene
- c) Isobutylene Isoprene
- d) Acrylonitrile 1,3-Butadiene

Q. 15 Following structure belongs to which polymer?



- a) Polystyrene
- b) Polycarbonate
- c) Nylon-66
- d) Saran

Q. 16 Ziegler–Natta catalysts allows preparation of

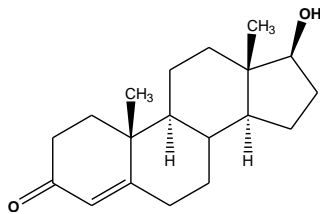
- a) Polypropylene
- b) Nitrile rubber
- c) Bakelite

d) Polyurethane

Q. 17 Morpholine is synthesized from,

- a) bis-(2-ethylamino)ethers
- b) bis-(1-aminomethyl)ethers
- c) bis-(2-aminoethyl)ethers
- d) bis-(3-aminopropyl)ethers

Q. 18 Chemical name of -



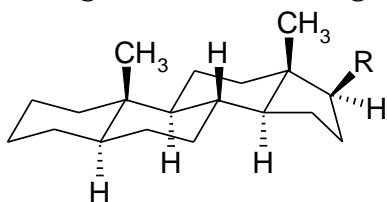
is

- a) 17 β -Hydroxyandrost-4-en-3-one
- b) Estra-17 β -Hydroxy-4-en-3-one
- c) 17 α -Hydroxyandrost-4-en-3-one
- d) 17 β -Hydroxyandrost-3-en-4-one

Q.19 Pregnenolone is converted into 17 α -Hydroxypregnenolone by which of the following enzyme?

- a) 21-hydroxylase
- b) 17 α -hydroxylase
- c) 17 α -lyase
- d) 11 β -hydroxylase

Q. 20 Configuration of following steroid is



- a) trans-trans-trans
- b) trans-cis-trans
- c) cis-trans-trans
- d) trans-trans-cis

Q. 21 Which of the following bases doesnot need protection during DNA synthesis?

- a) Adenine
- b) Cytosine
- c) Gyanine
- d) Thymine

Q.22 In which method of synthesis of quinoline, aniline is treated with sulphuric acid, glycerol and oxidizing agent?

- a) Doebner-Miller synthesis
- b) Skraup synthesis
- c) Conrad-Limpach synthesis
- d) Friedlander synthesis

Q.23 In isoquinoline at what position nucleophilic substitution reaction takes place?

- a) Fourth position
- b) Second position
- c) First position
- d) Third position

Q.24 Following are the endogenous steroidal hormones except

- a) Estradiol
- b) Progesterone
- c) Cholesterol
- d) (20R)-5 α -Pregnane-3 β ,20-diol

Q.25 The reagent 1-fluoro-2,4-dinitro benzene which is used to determine N- terminal amino acid residue in peptides is in-

- a) Edman method
- b) Sanger method
- c) Coupling method
- d) Hydrolysis method