

CG-11-2020

WINTER EXAM 2020

Subject Name : RB-03\_CHEMISTRY - Organic Chem + Inorganic Chemistry – XII (CBCS)\_V

Date : 16/03/2021

Duration : 60 min. |

Instruction / सूचना / :-

\* Follow the detail instructions given on OMR Sheet

\* ओ एम आर वरील सर्व सूचनांचे पालन करावे.

- The IUPAC name of  is? 114
- A) Oxole 114  
 B) Azole  
 C) Thiole  
 D) Azine
- Q.1 A]A  C]C   
 B]B  D]D
- What is molecular formula of pyrrole? 114
- A) C<sub>4</sub>H<sub>3</sub>N 114  
 B) C<sub>4</sub>H<sub>4</sub>N  
 C) C<sub>4</sub>H<sub>5</sub>  
 D) C<sub>4</sub>H<sub>4</sub>O
- Q.2 A]A  C]C   
 B]B  D]D
-  COOH  $\xrightarrow{\text{Heat}}$  ? 114
- A) Furan  
 B) Pyrrole  
 C) Thiophene  
 D) Pyridine
- Q.3 A]A  C]C   
 B]B  D]D
- With which reagent pyrrole reacts in presence of alkali to yield 2-formylpyrrole in Reimer-Tiemann reaction? 114
- A) CHCl<sub>3</sub>  
 B) Co<sub>2</sub> & HCl  
 C) HCN & HCl  
 D) HCl
- Q.4 A]A  C]C   
 B]B  D]D
- Mild reduction of pyrrole with ..... yields 3 - pyrroline 114
- A) H<sub>2</sub> / pt  
 B) H<sub>2</sub> / Ni  
 C) Zn / Ch<sub>3</sub>COOH  
 D) All of above
- Q.5 A]A  C]C   
 B]B  D]D
- 84°C is the boiling point of ..... 114
- A) Furan  
 B) Thiophene  
 C) Pyrrole  
 D) Indole
- Q.6 A]A  C]C   
 B]B  D]D
- Nitration of pyridine with KNO<sub>3</sub> in the presence of H<sub>2</sub>SO<sub>4</sub> at 230°C gives .... 114
- A) 2-Nitropyridine  
 B) 3-Nitropyridine  
 C) 4-Nitropyridine  
 D) None of these
- Q.7 A]A  C]C   
 B]B  D]D
-   $\xrightarrow[\text{ii. CaO / } \Delta]{\text{i. K}_2\text{Cr}_2\text{O}_7 / \text{H}^+}$  ? 114
- A) Indole  
 B) Quinoline  
 C) Isoquinoline  
 D) Pyridine
- Q.8 A]A  C]C   
 B]B  D]D
- In skraup synthesis glycerol is heated with ..... in presence of H<sub>2</sub>SO<sub>4</sub> and nitrobenzene to form quinoline. 114
- A) Acrolein  
 B) Benzointrile  
 C) Anisole  
 D) Aniline
- Q.9 A]A  C]C   
 B]B  D]D
- Q.10 Which of the following drugs is an analgesic drug ? 114
- A]Sulfanilamide  C]Isoniazide   
 B]Penicillin  D]Paracetamol
- Q.11 The drug effective in the treatment of tuberculosis is .....

A)Sulfanilamide <input type="checkbox"/>	114	C)Isoniazide <input type="checkbox"/>	114
B)Aspirin <input type="checkbox"/>		D)Paludrine <input type="checkbox"/>	114
Q.12 Chloroquine is ..... drug.	114	C)Antibacterial <input type="checkbox"/>	114
A)Antibiotic <input type="checkbox"/>		D)Antifungal <input type="checkbox"/>	
B)Anti-malarial <input type="checkbox"/>			
Q.13 The chemotherapeutic action of tolbutamide is .....	114	C)Antidiabetic <input type="checkbox"/>	114
A)Antipyretic <input type="checkbox"/>		D)Anaesthetic <input type="checkbox"/>	
B)Sedative <input type="checkbox"/>			
Q.14 The drug used for the treatment of mental diseases is called .....	114	C)Tranquillizer <input type="checkbox"/>	114
A)Anti-inflammatory <input type="checkbox"/>		D)Antifungal <input type="checkbox"/>	
B)Antibacterial <input type="checkbox"/>			
Q.15 Orange-II is .....	114	C)Neutral dye <input type="checkbox"/>	114
A)Acid dye <input type="checkbox"/>		D)Mordant dye <input type="checkbox"/>	
B)Basic dye <input type="checkbox"/>			
Q.16 According to Witt's theory which of the following is responsible for colour.	114	C)Metaphore <input type="checkbox"/>	114
A)Chromophore <input type="checkbox"/>		D)All of above <input type="checkbox"/>	
B)Anxochrome <input type="checkbox"/>			
Q.17 Methyl orange is prepared by the coupling reaction of diazotized sulfanilic acid with .....	114	C)N-Methylaniline <input type="checkbox"/>	114
A)Aniline <input type="checkbox"/>		D)P-aminophenol <input type="checkbox"/>	
B)N, N - dimethylaniline <input type="checkbox"/>			
Q.18 Diamond black-F is a ..... dye.	114	C)vat <input type="checkbox"/>	114
A)Direct <input type="checkbox"/>		D)Mordant <input type="checkbox"/>	
B)Developed <input type="checkbox"/>			
Q.19 ..... is a class of ephedrine alkaloid.	114	C)Phenyl-ethyl amine <input type="checkbox"/>	114
A)Pyrroline <input type="checkbox"/>		D)Pyridine-pyrrolidine <input type="checkbox"/>	
B)Pyridine <input type="checkbox"/>			
Q.20 Presence of unsaturation in alkaloids is detected by using..... reagent.	114		114
A) Alkaline KMnO <sub>4</sub>			
B) Br <sub>2</sub> / CCl <sub>4</sub>			
C) H <sub>2</sub> / Ni			
D) All of above			
A)A <input type="checkbox"/>		C)C <input type="checkbox"/>	
B)B <input type="checkbox"/>		D)D <input type="checkbox"/>	
Q.21 Generally alkaloids have ..... taste.	114	C)Salty <input type="checkbox"/>	114
A)Bitter <input type="checkbox"/>		D)Sour <input type="checkbox"/>	
B)Sweet <input type="checkbox"/>			
Q.22 Which of the following is water soluble vitamin ?	114	C)C <input type="checkbox"/>	114
A)A <input type="checkbox"/>		D)D <input type="checkbox"/>	
B)B <input type="checkbox"/>			
Q.23 Ergocalciferol is also called as :	114	C)Vit. C <input type="checkbox"/>	114
A)Vit. A <input type="checkbox"/>		D)Vit. D <input type="checkbox"/>	
B)Vit. B <input type="checkbox"/>			
Q.24 Which of the following is an antihemorrhagic vitamin ?	114	C)Vit. K <input type="checkbox"/>	114
A)Vit. A1 <input type="checkbox"/>		D)Vit. E <input type="checkbox"/>	
B)Vit. B1 <input type="checkbox"/>			
Q.25 DDT is ..... pesticide	114	C)Rodenticide <input type="checkbox"/>	114
A)Insecticide <input type="checkbox"/>		D)Fungicide <input type="checkbox"/>	
B)Herbicide <input type="checkbox"/>			
Q.26 BHC is also known as :	114	C)Lindane <input type="checkbox"/>	114
A)666 <input type="checkbox"/>		D)All of above <input type="checkbox"/>	
B)Gammexane <input type="checkbox"/>			
Q.27 .	114	C)C <input type="checkbox"/>	114
A)A <input type="checkbox"/>		D)D <input type="checkbox"/>	
B)B <input type="checkbox"/>			
Q.28 Which metal complex is used in heart imaging process ?	114	C)Sc <input type="checkbox"/>	114
A)Tc <input type="checkbox"/>		D)Ti <input type="checkbox"/>	
B)Ru <input type="checkbox"/>			
Q.29 The surgeon removes cancer cells from body is called :	114	C)Radiotherapy <input type="checkbox"/>	114
A)Surgery <input type="checkbox"/>		D)All the above <input type="checkbox"/>	
B)Chemotherapy <input type="checkbox"/>			
Q.30 Chelation therapy is used to deliver ..... metals and remove ..... metals.	114	C)Non toxic, toxic <input type="checkbox"/>	114
A)toxic, Non-toxic <input type="checkbox"/>		D)Non-toxic, Non-toxic <input type="checkbox"/>	
B)toxic, toxic <input type="checkbox"/>			
Q.31 The inorganic complexes are used as drugs due to ..... bond.	114	C)Hydrogen <input type="checkbox"/>	114
A)Ionic <input type="checkbox"/>		D)Co-ordinate <input type="checkbox"/>	
B)Covalent <input type="checkbox"/>			
Q.32 An example of hexadentate ligand is :	114	C)Dipy <input type="checkbox"/>	114
A)EDTA <input type="checkbox"/>		D)Trien <input type="checkbox"/>	
B)en <input type="checkbox"/>			
The EAN of Ni in the complex ion [Ni(NH <sub>3</sub> ) <sub>6</sub> ] <sup>2+</sup> is :	114		114
A) 35			
B) 34			
C) 38			
D) 36			
Q.33			

A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
The IUPAC name of $K_4[Fe(CN)_6]$ is:	114	114
A) Potassium pentacyanoferrate (II)		
B) Potassium hexacyanoferrate (II)		
C) Potassium Pentacyanoferrate (III)		
D) Potassium hexacyanoferrate (III)		
Q.34		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
The coordination number of Fe in the given complex is .....	114	114
$K_3[Fe(CN)_6]$		
A) 4		
B) 6		
C) 2		
D) 8		
Q.35		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
Q.36		
Which of the following complexes doesnot show geometric isomerism ?	114	114
A) $Ma_3b_2$		
B) $Ma_2bc$		
C) $Mabcd$		
D) $Ma_3b$		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
How many chloride ions precipitated in the given complex by reaction with $AgNO_3$ ?	114	114
$[Co(NH_3)_4Cl_2] Cl$		
A) 2		
B) 1		
C) 3		
D) 4		
Q.37		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
Which of the following represents a chelating ligand ?	114	114
A) $Cl^-$		
B) $DMG$		
C) $\bar{O}H$		
D) $H_2O$		
Q.38		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
Chlophyll is a natural coordination compound and it contains :	114	114
A) Mg		
B) Fe		
C) Ca		
D) Ni		
Q.39		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	
$\bar{H}$ ligand is called :	114	114
A) Hydride		
B) Hydro		
C) Hydroxide		
D) Hydrido		
Q.40		
A]A <input type="checkbox"/>	C]C <input type="checkbox"/>	
B]B <input type="checkbox"/>	D]D <input type="checkbox"/>	