

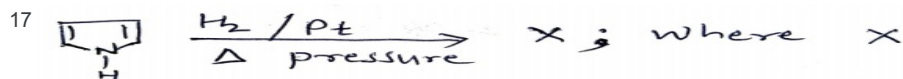
Time: One Hour

Max. Marks: 40

Instruction:

Attempt All Questions. Attempt Any 40 Questions From Q-1 To Q-40.

- 1 Which of the following vitamins helps in blood clotting?  
 (A)Vitamin A (B)Vitamin C (C)Vitamin D (D)Vitamin K
- 2 A pair of water soluble vitamins is:  
 (A)Vitamin B and C (B)Vitamin A and D (C)Vitamin C and K (D)Vitamin E and K
- 3 Which disease is caused by the deficiency of vitamin C?  
 (A)Pellagra (B)Scurvy (C)Rickets (D)Beriberi
- 4 Pesticides used to control rats are called:  
 (A)Insecticides (B)Rodenticides (C)Fungicides (D)Herbicides
- 5 DDT is prepared by the condensation of chloral with:  
 (A)Chlorobenzene (B)Anisol (C)Chloroacetic acid (D)Acetic acid
- 6 Monochrotophos is a well known:  
 (A)Fungicide (B)Rodenticide (C)Herbicide (D)Insecticide
- 7 Basic heterocyclic nitrogenous compounds of plant origin that are physiologically active are called -----  
 (A)Herbicides (B)Fats (C)Carbohydrates (D)Alkaloids
- 8  $C_{10}H_{14}N_2$  Is the molecular formula of:  
 (A)Ephedrine (B)Nicotine (C)Quinine (D)Coniine
- 9 Which statement is/are correct about alkaloids?  
 (A)They are basic in nature (B)They have bitter taste (C)They are optically active (D)All of above
- 10 The drug that relieves pain without loss of consciousness is:  
 (A)Anti malarial drug (B)Analgesic drug (C)Antitubercular drug (D)Antibiotics
- 11 Antidiabetic drug -----  
 (A)Reduces fever (B)Produces temporary insensibility (C)Controls blood sugar (D)Improves mood
- 12 Acetylation of salicylic acid gives ----- drug.  
 (A)Aspirin (B)Acetyl salicylic acid (C)Both a & b (D)Paracetamol
- 13 Sulphanilamide is a well known :  
 (A)Antibacterial drug (B)Antidiabetic drug (C)Anaesthetic drug (D)Analgesic drug
- 14 Which of the following pairs is a pair of functional drugs?  
 (A)Analgesics, antipyretics (B)Antimalarials, tranquillizers (C)Antitubercular, Analgesics (D)Analgesics, Antibacterial
- 15 A five member ring containing oxygen is:  
 (A)Thiophene (B)Furan (C)Pyrrole (D)Both a & b
- 16 Which of the following reactions gives 2-formylfuran from furan?  
 (A)Gomberg reaction (B)Friedel-crafts reaction (C)Gattermann- Koch reaction (D)Diel's -Alder reaction



- (A)Pyrrolidine (B)3-pyrroline (C)Piperidine (D)All of above



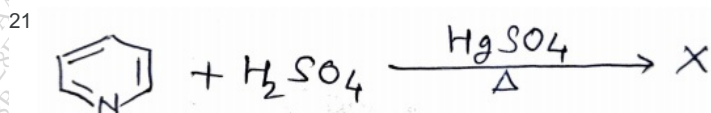
- (A)2-Butylthiophene (B)3- Butylthiophene (C)2-Lithium thiophene (D)3-Lithium thiophene

19 Sulphur atom in thiophene is ----- hybridized.

- (A)  $sp^3$  (B)  $sp^2$  (C)  $sp$  (D) None of above

20 Boiling point of pyridine is:

- (A)  $32^\circ C$  (B)  $131^\circ C$  (C)  $84^\circ C$  (D)  $115^\circ C$



Where X is:

- (A)Pyridine -2-sulphonic acid (B)Pyridine-3-sulphonic acid (C)Pyridine-4-sulphonic acid (D)Pyridine-N-oxide

22 Pyridine is obtained by passing a mixture of ----- in red hot tube.

- (A) Acetylene and hydrogen cyanide (B) Acetylene and ammonia (C)  $\beta$  - picoline and hydrogen chloride (D) Ethene and hydrogen cyanide
- 23 When aniline is heated with glycerol in the presence of  $H_2SO_4$  and  $C_6H_5NO_2$  gives Quinoline. The name of the synthesis reaction is:  
 (A) Skraup synthesis (B) Friedlander synthesis (C) Fischer-Indole synthesis (D) Bischler's synthesis
- 24 Which of the following is an auxochrome?  
 (A)  $-NH_2$  (B)  $-CHO$  (C)  $-NO_2$  (D)  $-CO-$
- 25 Which of the following dye is prepared by coupling diazotized sulphanic acid with  $\beta$  - Naphthol in basic medium?  
 (A) Diamond black-F (B) Phenolphthalein (C) Orange -II (D) Congo- Red
- 26 A coloured substance is called a good dye if it fulfills conditions/s :  
 (A) It must have a suitable colour. (B) It must be resistant to the action of water, dilute acids, alkalis etc. (C) It must fix on the fabric either directly or with the help of mordant. (D) All of above
- 27 According to Witt's theory of colour a group that is responsible for producing colour is:  
 (A) Chromophore (B) Auxochrome (C) Chromogen (D) Functional group
- 28 Mohr's salt is a example of -----  
 (A) Simple salt (B) Double salt (C) Coordinate compound (D) None of these
- 29 The complex that does not give a precipitate with  $AgNO_3$  solution is -----  
 (A)  $[Co(NH_3)_3Cl_3]$  (B)  $[Ag(NH_3)_2]Cl$  (C)  $[Co(NH_3)_6]Cl_3$  (D)  $[Cr(NH_3)_4Cl_2]Cl$
- 30 Which of the following is a bidentate ligand?  
 (A) Pyridine (B) EDTA (C) Ethylene diamine (D) Acetate ion
- 31 According to Werner's co-ordination theory, the secondary valency is ----  
 (A) Ionizable (B) Non ionizable (C) Directional (D) Both b and c
- 32 The IUPAC name for  $K_4[Fe(CN)_6]$  is -----  
 (A) Tetra potassium hexacyano iron (II) (B) Potassium hexacyano ferrate (III) (C) Potassium hexacyano ferrate (II) (D) Potassium hexacyano iron (II)
- 33 The complexes  $[Co(NH_3)_5Br]SO_4$  and  $[Co(NH_3)_5SO_4]Br$  are the example of ----  
 (A) Linkage isomerism (B) Ionisation isomerism (C) Co-ordination isomerism (D) Geometrical isomerism
- 34 The EAN of iron in  $[Fe(CN)_6]^{4-}$  is  
 (A) 34 (B) 35 (C) 36 (D) 37
- 35 In a co-ordination compound the negative groups or neutral molecules attached to the central metal atom is called as -----  
 (A) EAN (B) Ligands (C) Co-ordination number (D) Charge of metal ion
- 36 Which of the following complex species is not expected to exhibit optical isomerism?  
 (A)  $[Co(NH_3)_3Cl_3]$  (B)  $[Co(en)_3]^{3+}$  (C)  $[Co(en)_2Cl_2]^+$  (D)  $[Co(en)(NH_3)_2Cl_2]^+$
- 37 Chelation therapy is used for -----  
 (A) Detoxification of metal ion (B) Treatment of CORONA (C) AIDS (D) Tuberculosis
- 38 For the treatment of cancer drug is / are used -----  
 (A) Cisplatin (B) Carboplatin (C) Satraplatin (D) All of the above
- 39 Gold used in -----  
 (A) Antiarthritis drug (B) Anticancer drug (C) MRI (D) CT Scan
- 40 Gadolinium and Technetium are used as -----  
 (A) Bleaching agent (B) Imaging agent (C) Blueing agent (D) None of the above