

## CHEMISTRY

### QUESTION SET-1

1. The first noble gas compound prepared by Bartlett is:-  
a. XeF<sub>6</sub>   b. XeO<sub>3</sub>   c. Xe [ PtF<sub>6</sub>]   d. XeOF<sub>4</sub>
2. The coordination compounds with bidentate ligands are called as  
a. Complexes                      b. ligands                      c. Chelates                      d. Double salts
3. For the reaction  $N_2(g) + 3H_2(g) \rightarrow 2NH_3(g)$ ,  $\Delta H - \Delta E$  is equal to  
a. 2RT    b. -2RT    c. RT    d. -RT.
4. The reaction " $R-COCl + H_2 \xrightarrow{Pd-BaSO_4} R-CHO + HCl$ " is called  
a. Aldol's reaction    b. Cannizzaro's reaction    c. Friedel Craft reaction  
d. Rosenmund's reaction.
5. When sodium acetate is added to acetic acid, the acidic strength of the acid  
a. Increases    b. Decreases    c. Remains Unchanged    d. Cannot be predicted.
6. Which of the following is the most pure form of iron?  
a. Bessemer's iron    b. Steel    c. Pig iron    d. Wrought iron
7. Which of the following does not change the value of electrode potential?  
a. Conc. of the electrolyte    b. Temperature of the electrolyte  
c. Pressure of the substance    d. Stoichiometry of half cell reaction
8. Reaction of  $CH_3CONH_2$  with  $Br_2$  and  $KOH$  gives ----- as the major product.  
a.  $CH_3CH_2NH_2$     b.  $CH_3COOK$     c.  $CH_3NH_2$     d.  $CH_3COBr$
9. The Coordination number of Co in  $[Co(NH_3)_3Cl_3]$  is  
a. 2                      b. 3                      c. 4                      d. 6
10. Which of the following attacks glass?  
a. HF    b. HCl    c. HBr    d. HI
11. Electrolysis of dilute  $H_2SO_4$  liberates which gas at anode?  
a. H<sub>2</sub>    b. O<sub>2</sub>    c. SO<sub>2</sub>    d. SO<sub>3</sub>
12. Insulin is secreted from \_\_\_\_\_

- a. Pancreas b. Thyroid c. Ovaries d. all of these
13. Vaporization is an example of a process in which  
a.  $\Delta H$  &  $\Delta S$  are  $-ve$  b.  $\Delta H$  is  $-ve$  &  $\Delta S$  are  $+ve$  c.  $\Delta H$  is  $+ve$  &  $\Delta S$  are  $-ve$  d. Both  $\Delta H$  &  $\Delta S$  are  $+ve$
14. Carboic acid is \_\_\_\_\_  
a.  $H_2CO_3$  b.  $CH_3COOH$  c.  $C_6H_5COOH$  d.  $C_6H_5OH$
15. In  $XeF_4$  the hybridization of 'Xe' atom is \_\_\_\_\_  
a.  $Sp^3d^2$  b.  $Sp^3$  c.  $Sp^3d$  d.  $Sp^2d$
16.  ${}_{82}P^{206}$  is the end product of which radioactive series?  
a.  $4n$  b.  $4n+1$  c.  $4n+2$  d.  $4n+3$
17. Which of the following solutions has the highest pH value?  
a. 1M (NaCl) b. 1M( $CH_3COONa$ ) c. 1M ( $NH_4Cl$ ) d. 1M ( $H_2SO_4$ )
18. When a mixture of calcium formate and calcium acetate is dry distilled, then product formed is :-  
a) Ethanal b) Propanone c) Methanal d) Butanone
19. Formaldehyde can be distinguished from acetaldehyde by the use of:  
a) Fehling's solution b) Iodine in presence of a base c) Schiff's reagent d) Tollen's reagent
20. The formation of cyanohydrins from a ketone is an example of:  
a) Electrophilic addition b) Nucleophilic addition c) Nucleophilic substitution d) Electrophilic substitution

#### **ANSWERKEYS OF SET-6**

1. c  
2. c  
3. b  
4. d  
5. b  
6. d  
7. d  
8. c  
9. d

10.a

11.a

12.a

13.d

14.d

15.a

16.c

17.b

18.c

19.b

20.b