# đず doubtnut 

## CHEMISTRY

# BOOKS - NEET PREVIOUS YEAR 

## (YEARWISE + CHAPTERWISE)

## RE-NEET 2020

## Others

1. Which of the following statement is not true abount acid rain ?
A. It is due to reaction of $\mathrm{SO}_{2}, \mathrm{NO}_{2}$ and $\mathrm{CO}_{2}$
with rain water
B. Causes no damage to monuments like Taj mahal
C. It is harmful for plants
D. Its pH is less than 5.6

Answer: B

D Watch Video Solution
2. The oxidation number of the underlined atom in the following species. Identify the incorrect option.
A. $C u_{2} \underline{O}$ is -1
B. $\mathrm{ClO}_{3}^{-}$is +5
C. K_2underline(Cr)_2O_7 is +6
D. $\mathrm{H} \underline{\mathrm{Au} C l_{4}}$ is +3

## Answer: A

3. Reaction of propanamide with ethanolic sodium hydroxide and bromine will give

A. Ethylamine

B. Methylamine
C. Propylamine
D. Aniline

Answer: A

- Watch Video Solution


# 4. A liquid compound $(\mathrm{X})$ can be purified by Steam 

 distillation only if it isA. Steam volaile, IMmiscible with water
B. Not steam volatile, miscible with water
C. Steam volaile, miscible with water
D. Not steam volatile, immiscible with water

## Answer: A

## - Watch Video Solution

## 5. Among the compounds shown below which one

 revealed a linear structure?A. $\mathrm{NO}_{2}$
B. HOCl
C. $O_{3}$
D. $\mathrm{N}_{2} \mathrm{O}$

Answer: D
6. Which of the following compounds is most reactive in electrophilic aromatic substitution?

A.



Answer: D

## - Watch Video Solution

7. Which of the following will not undergo $S_{N}^{1}$ reaction with $\mathrm{OH}^{-}$
A. $\mathrm{CH}_{2}=\mathrm{CH}-\mathrm{CH}_{2} \mathrm{Cl}$
B. $\left(\mathrm{CH}_{3}\right)_{3} \mathrm{CCl}$
c.

## Answer: C

## - Watch Video Solution

8. Which of the following will not true abount chloramphenicol?
A. It inhibits the growth of only grampositivebacteria
B. It is a broad spectrum antibiotc
C. It is not bactericidal
D. It is bacteriostatic

Answer: A

D Watch Video Solution
9. Which of the following statement is correct about Bakellite?
A. It is a cross linked polymer
B. It is an addition polymer
C. It is a branched chain polymer
D. It is a linear polymer

## Answer: A

## - Watch Video Solution

10. If for a certain reaction $\triangle_{r} H$ is $30 \mathrm{KJ} \mathrm{mol}^{-1}$ at 450 K , the value of $\triangle_{r} S$ (in $J K^{-1} \mathrm{~mol}^{-1}$ ) for which the same reaction will be spontaneous at the same temperature is
A. 70
B. -33
C. 33
D. -70

Answer: A

- Watch Video Solution

11. Match the element in column I with that in
columb II.

## Column-I

## (a) Copper

(b) Fluorine
(c) Silicon
(d) Cerium

## Column-II

(i) Non-metal
(ii) Transition metal
(iii) Lanthanoid
(iv) Metalloid

Identify the correct match:
A. a-ii,b-iv,c-i,d-iii
B. a-ii,b-i,c-iv,d-iii
C. a-iv,b-iii,c-i,d-ii
D. $\mathrm{a}-\mathrm{i}, \mathrm{b}-\mathrm{ii}, \mathrm{c}-\mathrm{iii}, \mathrm{d}-\mathrm{iv}$

## Answer: B

12. Which of the following is a free radical substitution reaction?
A. Benzene with $B \frac{r_{2}}{A} l C l_{3}$
B. Acetylene with Hbr
C. Methane with $B \frac{r_{2}}{h} v$
D. Propene with $\mathrm{HB} \frac{r}{\left(\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{COO}\right)_{2}}$

## Answer: C

- Watch Video Solution

13. The reaction of concentrated sulphuric acid with carbohydrates $\left(\mathrm{C}_{12} \mathrm{H}_{22} \mathrm{O}_{11}\right.$ is an example of
A. Dehydration
B. oxidation
C. Reduction
D. Sulphonation

Answer: A

## 14. Which of the following substituted phenols is

 the strongest acid?



Answer: A

- Watch Video Solution

15. Match the compounds of Xe in column I with the molecular structure in column II.

## Column-I

(a) $\mathrm{XeF}_{2}$
(b) $\mathrm{XeF}_{4}$
(c) $\mathrm{XeO}_{3}$
(d) $\mathrm{XeOF}_{4}$

## Column-II

(i) Square planar
(ii) Linear
(iii) Square pyramidal
(iv) Pyramidal

Identify the correct match:
A. $a-i i, b-i, c-i i i, d-i v$
B. $a-i i, b-i v, c-i i i, d-i$
C. a-ii,b-iii,c-i,d-iv
D. a-ii,b-i,c-iv,d-iii
16. The half life for a zero order reaction having 0.02 M initial concentration of reactant is 100 s . The rate constant (in $\mathrm{mol} L^{-1} S^{-1}$ ) for the reaction is
A. $1.0 \times 10^{-4}$
B. $2.0 \times 10^{-4}$
C. $2.0 \times 10^{-3}$
D. $1.0 \times 10^{-2}$
17. Identify the incorrect statement from the following:
A. Zirconium and hafnium have identical radii
of 160 pm and 159 pm , respectively as a consequence of lanthnoid contraction.
B. Lanthanoids reveal only +3 oxidation state
C. The lanthanoid ions other than the $f^{0}$ type and the $1 f^{\wedge}(14)^{\prime}$ type are all paramagnetic
D. The overall decrease in atomic and ionic
radii from lanthanum to luetetium is called
lanthanoid contraction

Answer: B

- Watch Video Solution

18. Match the following aspects with the respective metal.

## Aspects

(a) The metal
which reveals
a maximum
number of
oxidation states
(b) The metal although placed in 3d block is
considered not
as a transition
element
(c) The metal which does not exhibit variable oxidation states
(d) The metal
which in +1
oxidation state in
aqueous solution
undergoes
disproportionation
A. $a-i, b-i v, c-i i, d-i i i$
B. $a-i i i, b-i v, c-i, d-i i$
C. $a-i i i, b-i, c-i v, d-i i$
D. a-ii,b-iv,c-i,d-iii

Answer: B

## - Watch Video Solution

19. If 8 g of a non-electrolyte solute is dissolved in

114 g of n -octane to educe its vapour pressure to
$80 \%$, the molar mass of the solute is [ given molar mass of $n$-octane is $114 \mathrm{~g} \mathrm{~mol}^{-1}$ ]
A. 40
B. 60
C. 80
D. 20

Answer: A

## - Watch Video Solution

20. Match the coordination number and type of
hybridisation with distribution of hybrid orbitals
in space based on valence bond theory.

## Coordination number and type of hybridisation <br> (a) $4, \mathrm{sp}^{3}$ <br> (b) $4, \mathrm{dsp}^{2}$ <br> (c) $5, \mathrm{sp}^{3} \mathrm{~d}$ <br> (d) $6, d^{2}$ sp $^{3}$

A. $a-i i, b-i i i, c-i v, d-i$
B. a-iii,b-iv,c-i,d-ii
C. a-iv,b-i,c-ii,d-iii
D. $a-i i i, b-i, c-i v, d-i i$

Answer: B
21. The number of angular nodes and radical nodes in 3s orbital are
A. 0 and 2 , respectively
B. 1 and 0, respectively
C. 3 and 0, respectively
D. 0 and 1, respectively

Answer: A
22. Identify the correct statement from the following
A. The order of hydration enthapies of alkaline
earth cations

$$
B e^{2+}<\mathrm{Mg}^{2+}<\mathrm{Ca}^{2+}<\mathrm{Sr}^{2+}<\mathrm{Ba}^{2+}
$$

B. Lithium and magnesium show some
similarities in their physical properties as
they are diagonally placed in periodic table
C. Lithium is softer among all alkali metals

## D. Lithium chloride is deliquescent and

 crystallises as a hydrate, LiCl. $\mathrm{H}_{2} \mathrm{O}$
## Answer: B

## D Watch Video Solution

23. Deficiency of which vitamin causes osteomalacia?
A. vitamin A
B. vitamin D
C. vitamin K

## D. vitamin E

## Answer: B

## D Watch Video Solution

24. Identify the wrongly matched pair.
A. $\mathrm{PCl}_{5}$ - trigonal planar
B. $S F_{6}$-Octahedral
C. $\mathrm{BeCl}_{2}$-Linear
D. $\mathrm{NH}_{3}$-Trigonal pyramidal

Answer: A

## - Watch Video Solution

25. $\mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}=\mathrm{CH}_{2} \xrightarrow[\mathrm{H}_{2} \mathrm{O}, \mathrm{H}_{2} \mathrm{O}_{2}, \mathrm{OH}-]{\mathrm{B}_{2} \mathrm{H}_{6}} \mathrm{Z}$

What is Z ?
A. $\mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}_{2} \mathrm{CH}_{2} \mathrm{OH}$
B. $\mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}(\mathrm{OH}) \mathrm{CH}_{3}$
C. $\mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}_{2} \mathrm{CHO}$
D. $\mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}_{2} \mathrm{CH}_{3}$
26. Identify the reaction from having top position in EMF series according to their electrode potential at 298 k

$$
\begin{aligned}
& \text { A. } M g^{2+}+2 e^{-\rightarrow} M g \\
& \text { B. } F e^{2+}+2 e^{-\rightarrow} F e \\
& \text { C. } A u^{3+}+3 e^{-\rightarrow} A u \\
& \text { D. } K^{+}+1 e^{-\rightarrow} K
\end{aligned}
$$

27. Match the element in column I with methods of
purification in columb II.

Column I
(a) Boron
(b) Tin
(c) Zirconium
(d) Nickel

## Column II

(i) Van Arkel method
(ii) Mond's process
(iii) Liquation
(iv) Zone refining

Identify the correct match:
A. $a-i v, b-i i i, c-i, d-i i$
B. $a-i v, b-i i i, c-i i, d-i$
C. a-ii,b-i,c-iv,d-iii
D. $a-i i i, b-i v, c-i, d-i i$

Answer: A

## - Watch Video Solution

28. Which among the following salt solutions is basic in nature?
A. Ammonium chloride
B. Ammonium sulphate
C. Ammonium nitrate
D. sodium acetate
29. In which of the sols, the colloidal particles are with negative charge?
A. $\mathrm{TiO}_{2}$
B. Haemoglobin
C. Starch
D. Hydrated $\mathrm{Al}_{2} \mathrm{O}_{3}$

Answer: C
30. Which of the following acid will form an (a)

Anhydride on heating and
(b) Acid amide on strong heating with ammonia?
A.

B.



Answer: A

## - Watch Video Solution

31. In a typical fuel cell, the reactants(R) and product ( P ) are:

$$
\begin{aligned}
& \text { A. } R=H_{2}(g), O_{2}(g), P=H_{2} O_{2}(l) \\
& \text { B. } R=H_{2}(g), O_{2}(g), P=H_{2} O(l)
\end{aligned}
$$

C.

$$
\begin{aligned}
& \quad R=H_{2}(g), \mathrm{O}_{2}(g), \mathrm{Cl}_{2}(g), \mathrm{P}=\mathrm{HClO}_{4}(a q) \\
& \text { D. } R=H_{2}(g), \mathrm{N}_{2}(g), P=\mathrm{NH}_{3}(a q)
\end{aligned}
$$

Answer: B

## - Watch Video Solution

32. In collision theory of chemical reaction, $Z_{A B}$ represents
A.the fraction of molecules with energies greater than $E_{a}$
B. the collision frequency of reactants, $A$ and $B$
C. steric factor
D. the fraction of molecules with energies
equal to $E_{a}$

Answer: B

## (D) Watch Video Solution

33. Which of the following statement is not true abount glucose?
A. It is an aldohexose
B. It contains five hydroxyl groups
C. It is a reducing sugar
D. It is an aldopentose

Answer: D

## - Watch Video Solution

34. The potential energy(y) curve for $H_{2}$ formation as a function of inrtnuclear distance( x ) of the H atoms is shown below


The bond energy of $H_{2}$ is :
A. $b-a$
B. $\frac{c-a}{2}$
C. $\frac{b-a}{2}$
D. $\mathrm{c}-\mathrm{a}$

Answer: A
35. Identify compound (A) in the following reaction:

A. Benzoyl chloride

B. Toulene

C. Acetophenone
D. Benzoic acid

## D Watch Video Solution

36. How many $s p^{2}$ hybridised carbon atoms and $\pi$ bonds respectively are present in the following compound?

A. 7,5
B. 8,6
C. 7,6
D. 8,5

Answer: C

## D Watch Video Solution

37. At standard conditions, if the change in the enthalpy for the following reaction is $-109 \mathrm{KJmol}^{-1}$ $\mathrm{H}_{2}(\mathrm{~g})+\mathrm{Br}_{2}(\mathrm{~g}) \rightarrow 2 \mathrm{HBr}(g)$

Given that bond energy of $H_{2}$ and $B r_{2}$ is 435 kj $\mathrm{mol}^{-1}$ and $192 \mathrm{kjmol}^{-1}$, respectively. What is the bond energy of HBr ?
A. 368
B. 736
C. 518
D. 259

Answer: A

## - Watch Video Solution

38. The minimum pressure required to compress $600 \mathrm{dm}^{3}$ of a gas at 1 bar to $150 \mathrm{dm}^{3}$ at $40^{\circ} \mathrm{C}$ is
A. $4.0^{-}$
B. $0.2^{-}$
C. $1.0^{-}$
D. $2.5^{-}$

## Answer: A

## D Watch Video Solution

39. What is the role of gypsum, $\mathrm{CaSo}_{4.2} \mathrm{H}_{2} \mathrm{O}$ in setting of cement? Identify the correct option from the following:
A. to fasten the setting process
B. to provide water molecules for hydration
C. to help to remove water molecules
D. to slow down the setting process

## Answer: D

## D Watch Video Solution

40. Which of the following oxide is amphoteric in nature?
A. $\mathrm{SnO}_{2}$
B. $\mathrm{SiO}_{2}$
C. GeO_2`
D. $\mathrm{CO}_{2} 2^{\prime}$

## Answer: A

## - Watch Video Solution

41. Which one of the following reactions does not come under hydrolysis type reaction?
A.
$\mathrm{SiCl}_{4}(l)+2 \mathrm{H}_{2} \mathrm{O}(l) \rightarrow \mathrm{SiO}_{2}(s)+4 \mathrm{HCl}(a q)$
B.

$$
L_{3} N(s)+3 \mathrm{H}_{2} \mathrm{O}(l) \rightarrow \mathrm{NH}_{3}(g)+3 \mathrm{LiOH}(a q)
$$

C. $2 \mathrm{~F}_{2}(g)+2 \mathrm{H}_{2} \mathrm{O}(l) \rightarrow 4 \mathrm{HF}(a q)+\mathrm{O}_{2}(g)$

$$
\text { D. } \mathrm{P}_{4} \mathrm{O}_{10}(s)+6 \mathrm{H}_{2} \mathrm{O}(l) \rightarrow 4 \mathrm{H}_{3} \mathrm{PO}_{4}(a q)
$$

## Answer: C

## D Watch Video Solution

42. Which one of the following compounds shows both, Frenkel as well as Schottky defects?
A. AgBr
B. Ag I
C. NaCl

## D. ZnS

Answer: A

## D Watch Video Solution

43. One mole of carbon atom weighs 12 g , the number of atoms in it is equal to, ( Mass of carbon-12 is $1.9926 \times 10^{-23} g$ )
A. $1.2 \times 10^{23}$
B. $6.022 \times 10^{22}$
C. $12 \times 10^{22}$
D. $6.022 \times 10^{23}$

## Answer: D

## D Watch Video Solution

44. Isotonic solutions have same
A. vapour pressure
B. freezing temperature
C. osmotic pressure
D. boiling temperature

Answer: C

## D Watch Video Solution

45. The solubility product for a salt of the type $A B$ is $4 \times 10^{-8}$. What is the molarity of its standard solution?

$$
\begin{aligned}
& \text { A. } 2 \times 10^{-4} \mathrm{~mol} / L \\
& \text { B. } 16 \times 10^{-16} \mathrm{~mol} / \mathrm{L} \\
& \text { C. } 2 \times 10^{-16} \mathrm{~mol} / \mathrm{L} \\
& \text { D. } 4 \times 10^{-4} \mathrm{~mol} / \mathrm{L}
\end{aligned}
$$

Answer: A

- Watch Video Solution

