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## CHEMISTRY

## BOOKS - NCERT FINGERTIPS CHEMISTRY (HINGLISH)

## PRACTICE PAPER-2

## Practice Paper 2

1. Which of the following pairs form the same
A. Glucose and fructose
B. Glucose and galactose
C. Glucose and arabinose
D. Lactose and maltose

Answer: A

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2. Which of the following is satisfied by an ideal solution?
A. Formation of an azeetropic mixture
B. $\Delta S_{m i x}=0$
C. Raoutl's law is obeyed under particlar set of conditions only
D. $\Delta H_{m i x}=0$

## Answer: D

## D View Text Solution

3. Which one has the highest melting point ?
A. Ionic crystal
B. Molecular crystal
C. Covalent crystal
D. Metallic crystal

## Answer: C

## D View Text Solution

4. Match the column I with column II and mark
the appropriate choice.

| Column I |  |  | Column II |
| :--- | :--- | :--- | :--- |
| (A) | Acetyl salicylic acid | (i) | Insecticide |
| (B) | DDT | (ii) | Drug |
| (C) | Naphthalene | (iii) | Fire <br> extinguisher |
| (D) | Carbon tetrachloride | (iv) | Moth repelling |

A. $A \rightarrow i i, B \rightarrow I, C \rightarrow i v, D \rightarrow i i i$
B. $A \rightarrow i i i, B \rightarrow i v, C \rightarrow I, D \rightarrow i i$
C. $A \rightarrow i i, B \rightarrow i v, C \rightarrow i i i, D \rightarrow i$
D. $A \rightarrow i v, B \rightarrow I, C \rightarrow i i i, D \rightarrow i i$

Answer: A

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5. Lanthanoids are-
A. 14 elements in the sixth period (atomic no. 90 to 103) that are filling 4 f sublevel
B. 14 elements in the seventh period
(atomic no. 90 to 103 ) that are filling $5 f$
sublevel
C. 14 elements it the sixth period (atomic
no. 58 to 71 ) that are filling the $4 f$
sublevel
D. 14 elements in the seventh period
(atomic no. 50 to 71 ) that are filling $4 f$ sublevel.

## Answer: C

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6. Which of the following pairs of structures represents facial and meridional isomers resectively ?
A.





## Answer: A

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## 7. What is the main composition of matte?

## A. CuS

B. CuO
C. $C u_{2} S$
D. $\mathrm{Cu}_{2} \mathrm{O}$

## Answer: C

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8. Which of the following does not show positive deviation form Raoult's law ?
A. Phenol-aniline

## B. Ethanol-acetone

C. Acetone-carbon disulphide
D. Methanol -water

## Answer: A

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## 9. Which of the following is not an artificial

 sweetener?A. Sucralose

## B. Alitame

## C. Saccharin

D. Sucrose

## Answer: D

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10. Equanil is an example of
A. artificial sweeteners
B. tranquilizers

## C. antihistamines

## D. antifertility drugs .

## Answer: B

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11. The freezing point depression of 0.1 molal solution of acetic acid in benzene is 0.256 K ,
$K_{f}$ for benzene is $5.12 \mathrm{~K} \mathrm{Kg} \mathrm{mol}{ }^{-1}$. What conclusion can you draw about the molecular state of acetic acid in benzence?
A. Acetic acid is doubly associated
B. Benzene is doubly associated
C. Both are equally associated
D. None of the above.

## Answer: A

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12. An example of dibasic acid is
A. orthophosphorous acid

## B. orthophosphoric acid

C. hypophosphorous acid
D. pyrophosphoric acid.

Answer: B

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13. Synthetic rubbers are usually obtained by
copolymeisation of
A. alkane and 1, 3 - butandience
B. 1,4-polyisoprene
C. urea and formaldehyde
D. alkene and 1,3-butadiene.

## Answer: D

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14. The arrangement $A B C A B C$....is referred to as
A. octahedral close packing
B. hexagonal close packing
C. tetrahedral close packing
D. cubic close packing

## Answer: D

D View Text Solution
15. The number of Faradays needed to reduce

4 g equivalents of $C u^{2+}$ to Cu metal will be
A. 1
B. 2
C. $1 / 2$
D. 8

## Answer: D

## D Watch Video Solution

16. 

The
reaction
$2 A B(g)+2 C(g) \rightarrow A_{2(g)}+2 B C_{(g)}$
proceeds according to the mechanism.
I. $2 A B \Leftrightarrow A_{2} B_{2}$ (fast)
II. $A_{2} B_{2}+C \rightarrow A_{2} B+B C$ (slow )
III. $A_{2} B+C \rightarrow A_{2}+B C$ (fast)
what will be the initial rate taking $[A B]=0.2 \mathrm{M}$
and $[\mathrm{C}]=0.5 \mathrm{M}$ ? The $K_{c}$ for the step I is
$10^{2} M^{-1}$ and rate constant for the step II is
$3.0 \times 10^{-3} \mathrm{~mol}^{-1} \mathrm{~min}^{-1}$
A. $0.0716 M \min ^{-1}$
B. $0.0891 M \min ^{-1}$
C. $0.006 M \min ^{-1}$
D. $0.0257 M \mathrm{~min}^{-1}$

Answer: C
17. I both DNA and RNA, heterocyclic base and phosphate ester linkages are at
A. C-5 and C-2 respectively of the sugar molecule
B. C-2 and C-5 respectively of the sugar molecule
C. C-1 and C-5 respecgively of the sugar

# D. C-5 and C-1 respectively of the sugar 

 molecule.
## Answer: C

## D View Text Solution

18. MgO crystallized as rock salt. The number of nearest oxide ions to $M g^{2+}$ ion is
A. two
B. four
C. six
D. twelve

## Answer: C

## D View Text Solution

19. Name of the drug whose structure given below is

A. Chloramphenicol
B. vancomycin
C. penicillin
D. ofloxacin

Answer: C

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20. In the Cannizzaro reaction given below:

$$
2 \mathrm{Ph}-\mathrm{CHO} \xrightarrow{\stackrel{\ominus}{\mathrm{O}} \mathrm{H}} \mathrm{Ph}-\mathrm{CH}_{2} \mathrm{OH}+\mathrm{PhCO}_{2}^{-}
$$

the slowest step is:
A.tge attack of : $O H^{-}$at the carbonyl group
B. the transfer of hydride to the carbonyl
group
C. The abstraction of proton from the
carboxylic group

## D. The deprotonation of $\mathrm{PhCH}_{2} \mathrm{OH}$

## Answer: B

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21. In the following question, a statement of assertion is followed by a statement of reason.

Mark the correct choice.

Assertion : In any ionic solid [MX] with
schottky defects, the number of positive and negative ions are same.

Reason : Equal number of cation and aniojn
vacancies are present.
A. Both assertion and reason are true and reason is the correct explanation of assertion .
B. Both assertion and reason are true but reason.
C. Assertion is true but reason is false.
D. Both assertion and reason are false.
22. A synthetic polyamide prepared by prolonged heating of caporlactam is
A. nylon 6,6
B. nylon 6
C. nylon 6,10
D. glyptal.

Answer: B
23. In the long form of the periodic table, the transition metals are placed in
A. s-block
B. f-block
C. d-block
D. $s$ and $p$ - block.

Answer: C

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24. Which of the following is a colligative property?
A. Surface tension
B. Viscosity
C. Refractive index
D. Osmotic pressure

## Answer: D

25. Which of the following is a false statement

## ?

A. Halognes are strong oxidising agents.
B. Halogens show only-1 oxidation agents.
C. HF molecules form intermolecular hydrogen bonding .
D. Fluorine is highly reactive.

## Answer: B



In the above reaction sequence, $\mathrm{A}, \mathrm{B}$ and C respectively are
A. benzene, nitrobenzene, aniline
B. benzene ,m-dinitrobenzene , mnitroaniline
C. touluene, m-nitrotoluene, m-toluidine
D. benzene, nitrobenzene, hydrazobenzene.

## Answer: D

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27. Four successive members of the first row transition elements are listed below with their atomic number. Which one of them is expected to have the highest third ionisation enthalpy?
A. Vanadium (Z-23)
B. Manganese $(Z=25)$

## C. Chromium ( $\mathrm{Z}=24$ )

D. Iron ( $Z=26$ )

Answer: B

## D Watch Video Solution

28. Alcohols of low molecular weight are
A. soluble in water
B. soluble in water on heating
C. insoluble in water

## D. insoluble in all solvents.

## Answer: A

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29. Which of the following statement are correct ?
(i) Smaller the gold number of lyophilic colloid, larger will be its protective power
(ii) Lyophilic sols, in contrast to lyophobic sols are easily coagulated on addition of small
amounts of electrolytes.
(iii) Ferric chloride solution is used to stop bleeding from a fresh cut because it coagulating the blood
(iv) The flocculatin value of arsenious sulphide sol is independent of the anion of the coagulating
A. (i),(ii) and (iii)
B. (i) , (iii) and (iv)
C. (ii) , (iii) and (iv)
D. (i),(ii) and (iv)

Answer: B

## D View Text Solution

30. The method of zone refining of metals is based on the principle of
A. greater mobility of pure metal than that of impurity
B. higher melting point of the impurity
than that of pure metal
C. greater noble character of solid metal than that of impurity

D. greater solubility of the impurity in the

molten state than in the solid.

Answer: D

D View Text Solution
31. Strength of acideity is in order

- OH

II.

$\mathrm{NO}_{2}$
IV.
OH

$\mathrm{NO}_{2}$
A. II gt I gt III gt IV
B. III gt IV gt I gt II
C. Igt IV gt III gt II


## D. IV gt III gt I gt II

Answer: B

## D View Text Solution

32. Which of the following is paramagnetic as
well as coloured ion ?
A. $C u^{+}$
B. $C u^{2+}$
C. $S c^{3+}$

## D. $Z n^{2+}$

## Answer: B

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33. Antiseptic Chloroxylenol is
A. 4-chloro-3. 5-dimethylphenol
B. 3-chloro-4, 5-dimethylphenol
C. 4-chloro-2, 5-dimethylphenol
D. 5-chloro-3,4-dimethylphenol

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## 34. PVC is an example of

A. theremosetting
B. thermoplastic
C. elastic
D. fibre.

$$
\text { A. } 3^{\circ}>2^{\circ}>1^{\circ}
$$

$$
\text { B. } 2^{\circ}>3^{\circ}>1^{\circ}
$$

C. $1^{\circ}>2^{\circ}>3^{\circ}$
D. none of these.

Answer: C
36. Which of the following alkenes is the most reactive towards cationic polymerisation ?
A. $\mathrm{CH}_{2}=\mathrm{CHCH}_{3}$
B. $H_{2}=C H C I$
C. $\mathrm{H}_{2} \mathrm{C}=\mathrm{CHC}_{6} \mathrm{H}_{5}$
D. $\mathrm{H}_{2} \mathrm{C}=\mathrm{CHCO}_{2} \mathrm{CH}_{3}$

Answer: C

D View Text Solution
37.

The
reaction
$\mathrm{Ar} \stackrel{+}{\mathrm{N}}_{2} \mathrm{Cl}^{-} \xrightarrow{\mathrm{Cu} / \mathrm{HCl}} \mathrm{ArCl}+\mathrm{N}_{2}+\mathrm{CuCl} \quad$ is
named as
A. Sandmeyer reaction
B. Gatterman reaction
C. Hofmann bromamie degradation
reaction
D. Carbylamine reaction

Answer: B
38. Latex is acolloidal solution of rubber particles which are
A. positively charged
B. negatively charged
C. neutral
D. can be negatively and positively charged.

Answer: B

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39. In a solid lattice the cation and anion both
have left a lattive site. The lattice defect is known as
A. intestitial defect
B. vancancy defect
C. Frenkel defect

D. schottky defect

Answer: D
40. Which of the following will not undergo aldol condensation ?
A. Propional dehyde
B. Acetone
C. Formaldehyde
D. Acetaldehyde

Answer: C
41. Calculate the ebullioscopic constant for water. The heat of vaporisation is 40.685 kJ $\mathrm{mol}^{-1}$
A. $0.512 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$
B. $1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$
C. $5.12 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$
D. $3.56 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$

Answer: A
42. Which of the following represents the correct order of acidic strength ?
A. HOCl lt HOBr It HOI
B. HOCl lt HOl It HOBr
C. HOBr It HOI It HOCl
D. HOl lt HOBr It HOCl

Answer: D

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43. Which of the following is a fat soluble vitamin ?
A. Vitamin A
B. Vitamin C
C. Pyridoxine
D. Vitamin -B- complex

Answer: A

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44. 

The
reaction

# Dry acetone <br> $\mathrm{RCl}+\mathrm{NaI} \xrightarrow{\text { Dry acetone }} \mathrm{R}-\mathrm{I}+\mathrm{NaCl}$ 

known as
A. Wurtz reaction
B. Fitting reaction
C. Wurtz-Fitting reaction
D. Finkelstein's reaction .

Answer: D

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45. For a first- order reaction, the time required for $99.9 \%$ of the reaction to take place is nearly
A. 10 times that required for half the reaction
B. 100 times that required for two-third of
the reaction
C. 10 times that required for one- fourth of
the reaction

## D. 20 times that required for half of the

 reaction .
## Answer: A

## D View Text Solution

46. Sphalerite and siderite are the ores of the metals
A. AI and Zn
B. Fe and Cu

## C. Cu and Zn

D. Fe and Zn

## Answer: D

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47. Which of the following is the most impure form of iron?
A. Bessemer iron
B. Steel
C. Pig iron
D. Wrought iron

## Answer: C

## D View Text Solution

48. The presence or absence of hydroxy group
on which carbon atom of sugar differentiates
$R N A$ and $D N A$.
A. $1^{s t}$
B. $2^{\text {nd }}$
C. $3^{r d}$
D. $4^{\text {th }}$

Answer: B

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49. The formulation of dettol contains
A. chloroxylenol
B. terpineol

## C. alcohol

## D. All of these

## Answer: D

## D View Text Solution

50. Which of the following does not undergo

Hell-Volhard-Zelinsky reaction ?
A. HCOOH
B. $\mathrm{CCI}_{3} \mathrm{COOH}$

## C. $\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{COOH}$

D. All of these

Answer: D

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