

Maharashtra Board Class 12 Chemistry Answer
Key 2024 (Unofficial)

▶ ALL A

SECTION - A

Q. 1. Select and write the correct answer for the following multiple choice type of questions : [10]

(i) The spin only magnetic moment of Cr^{3+} cation is ____.

(a) 3.742 BM (b) 3.755 BM
(c) 3.873 BM (d) 3.633 BM

Ans: C

(ii) The linkage present in Lactose is ____.

(a) $\alpha, \beta - 1, 2 -$ glycosidic linkage
(b) $\alpha - 1, 4 -$ glycosidic linkage
(c) $\beta - 1, 4 -$ glycosidic linkage
(d) $\alpha - 1, 4 -$ glycosidic linkage

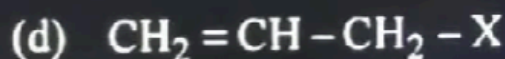
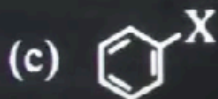
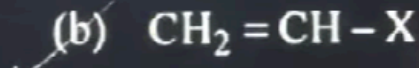
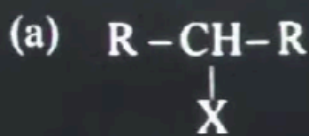
Ans: B

(iii) The product of the following reaction is

$$\text{C}_2\text{H}_5 - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_3 \xrightarrow[\Delta]{\text{H}_2 / \text{Ni}} ?$$

(a) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{OH}$
(b) $\text{CH}_3 - \underset{\text{OH}}{\text{CH}} - \text{CH}_2 - \text{CH}_3$
(c) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
(d) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{COOH}$

(viii) Among the following vinylic halide is _____.



Ans: B

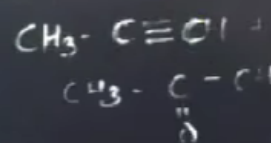
(ix) The product of hydrolysis of propyne in the presence of 1% H_2SO_4 and 40% H_2SO_4 is _____.

(a) methanal

(b) ethanal

(c) propanal

(d) propanone



Ans: D

(x) If unit of rate constant is $\text{mol dm}^{-3}\text{s}^{-1}$, the order of reaction would be _____.

(a) zero

(b) 1

(c) 2

(d) 3

Ans: A

Q. 2. Answer the following questions :

(i) Write the name of metal nanoparticle used to remove E.coli bacteria from water.

(ii) Write the name of reduction product formed when ethyl cyanide is treated with sodium and alcohol.

(iii) Complete the reaction: $\text{CH}_3\text{CH}_2\text{Cl} \xrightarrow[\text{alc.}\Delta]{\text{AgCN}} ?$

(iv) Calculate effective atomic number of $[\text{Co}(\text{NH}_3)_6]^{3+}$ ion.

- (v) The compounds of Ti^{4+} ions are colourless due to
- (vi) Write SI unit of molar conductivity.
- (vii) Write the sign convention of work done during expansion of gas. $-ve$
- (viii) Write the condition of reverse osmosis.

Ans:

(i) Silver

(ii) Mendius reduction

(iii) $CH_3CH_2Cl - AgCN(alc)$ A major $\rightarrow Na - Hg/$ alcohol B

(iv) Na_3AlF_6

(v) Cisplatin

(vi) $K\ kg\ mol^{-1}$ or $^{\circ}C\ Kg\ mol^{-1}$

(vii) $AG = AH - TAS$; AG must be negative.

(viii) $20\ 02^{-1}\ cm^2\ mol^{-1}$