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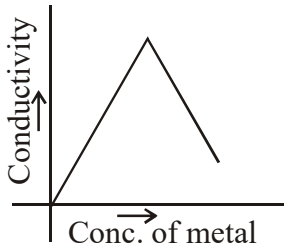
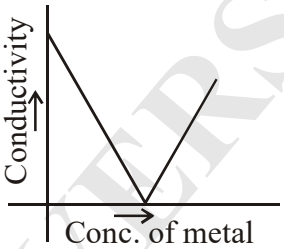
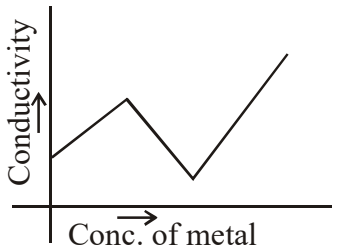
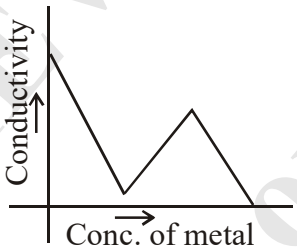
(A) 

(B) 

(C) 

(D) 

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(C) $CO(g) + H_2O(g) \xrightarrow[FeCrO_4]{673K} CO_2(g) + H_2(g)$

(D) $C(s) + O_2(s) + 4N_2(g) \xrightarrow{1273K} 2CO + 4N_2$

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$2BeCl_2 + LiAlH_4 \rightarrow$ Product(s)
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(D) On passing steam over red hot coke

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(A) Fluoride (B) Chloride (C) Bromide (D) Iodide

Q.15 Which element reacts with water and gives acidic solution ?
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Q.18 Which group elements exhibit gradual increment of melting point as atomic number decreases ?
(A) alkali metals (B) alkaline earth metals
(C) boron family (D) carbon family

Q.19 Which of the following statement is **not** true for H_2 ?
(A) It is lighter than air and soluble in water
(B) H – H bond dissociation enthalpy is the highest for a single bond between two atoms of any element
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(D) It can reduce heavy metal oxides into their respective metals

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Q.21 Which of the following compound on heating **does not** produce metal oxide ?
(A) $MgCl_2 \cdot 6H_2O$ (B) $K_2Cr_2O_7$ (C) K_2CO_3 (D) $CsNO_3$

Comprehension

Comprehension (Q.22 – Q.23) :

Hydrogen peroxide is an important chemical used in pollution control treatment of domestic and industrial effluents. In the pure state H_2O_2 is an almost colourless (very pale blue) liquid. It acts as an oxidising as well as reducing agent in both acidic and alkaline medium.

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(A) Evaporation under reduced pressure.
(B) Evaporation under increased pressure.
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More than one may be correct

Q.24 Select correct orders of percentage components of Portland cement :
(A) $SiO_2 < AlO_3$ (B) $CaO > (SiO_2 + Al_2O_3 + Fe_2O_3)$
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Q.27 **Correct** statement(s) about sodium carbonate is/are
(A) Crystalline $Na_2CO_3 \cdot 10H_2O$ is called washing soda
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Q.32 Correct order(s) is/are
(A) Melting point : $H_2O < D_2O$
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Subjective

Q.35 Find out total number of chemicals that are used to manufacture Na_2CO_3 by "Slovay process" from following chemicals
NH_3, KCl, CO_2, SO_2, $Ca(OH)_2$, NaCl, H_2SO_4, CO, HCl

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Sulphur, Calcium, Nitrogen, Phosphorus, Boron, Oxygen, Chlorine, Xenon, Silicon

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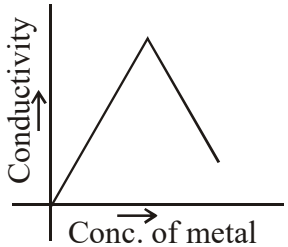
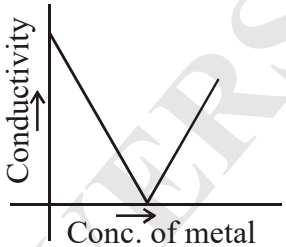
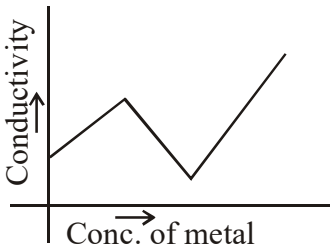
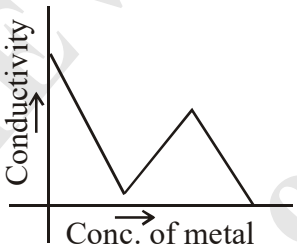
(A) 

(B) 

(C*) 

(D) 

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