

$$E_{\text{Ce}^{+4}/\text{Ce}^{+3}}^{\circ} = 1.44\text{V} \ \& \ E_{\text{Fe}^{+3}/\text{Fe}^{+2}}^{\circ} = 0.68\text{V}$$

20. A current of 3A was passed for 1 hr through an electrolyte solution of A_xB_y in water. If 2.977 g of A (molecular wt. 106.4) was deposited at cathode and B was a monovalent ion, the formula of electrolyte is
21. A SHE (Standard Hydrogen Electrode) has zero electrode potential because:
- Hydrogen is easiest to oxidize
 - This electrode potential is assumed to be zero.
 - Hydrogen atom has only one electron.
 - Hydrogen is the lightest element.
22. The standard, E for three metallic cations X, Y, Z are 0.52V, -3.03V and -1.18 V respectively. The order of reducing power is:
- $Y > Z > X$
 - $X > Y > Z$
 - $Z > Y > X$
 - $Z > X > Y$
23. Total charge required to convert three moles of Mn_3O_4 to MnO_4^- in presence of alkaline medium:
- 10 F
 - 20 F
 - 30 F
 - 40 F
24. Select the correct statement:
- Faraday represents 96500 Coulomb per sec.
 - Coulomb represents one ampere for 1/2 sec.
 - Coulomb represents 1/2 ampere for 1 sec.
 - Coulomb represents charge of 1 mole electron.
25. Saturated solution of KNO_3 is used to make salt – bridge because:
- Velocity of K^+ is greater than that of NO_3^- .
 - Velocity of NO_3^- is greater than that of K^+ .
 - Velocity of K^+ and NO_3^- is nearly the same.
 - KNO_3 is highly soluble in water.