Cell constant and Electrochemical Cells

51. Which of the following statement is true for an electrochemical cell
(a) $H_2$is cathode and $Cu$is anode
(b) H_2 is anode and *Cu* is cathode
(c) Reduction occurs at H_2electrode
(d) Oxidation occurs at *Cu* electrode

52. Which of the following statements are true for an fuel cells
(a) They run till the reactants are active
(b) They are free from pollution
(c) They are more efficient
(d) All of the above

53. For gold plating, the electrolyte used is
(a) $AuCl_3$
(b) $HAuCl_4$
(c) $k[Au(CN)_2]$
(d) None of these

54. The acid used in lead storage battery is
(a) H_2SO_4 (b) H_3PO_4
(c) *HCl* (d) HNO_3

55. At 25°*C* specific conductivity of a normal solution of *KCl* is 0.002765 *mho.* The resistance of cell is 400 *ohms*. The cell constant is
(a) 0.815 (b) 1.016
(c) 1.106 (d) 2.016

56. Which of the following is used widely in the manufacture of lead storage battery
(a) Arsenic (b) Lithium
(c) Bismuth (d) Antimony

57. The chemical reaction, $2AgCl(s) + H_2(g) \rightleftarrows 2HCl(aq) + 2Ag(s)$ taking place in a galvanic cell is represented by the notation
(a) $Pt|H_2(g)$,1bar|$1M\ KCl(aq)|AgCl(s)|Ag(s)$
(b) $Pt(s)|H_2(g)$, 1bar| $1M\ HCl(aq)||1M\ Ag^+(aq)|Ag(s)$
(c) $Pt(s)|H_2(g)$, 1bar| $1M\ HCl(aq)|AgCl(s)|Ag(s)$
(d) $Pt(s)|H_2(g)$, 1bar| $1M\ HCl(aq)|Ag(s)|AgCl(s)$

58. If the Zn^{2+}/Zn electrode is diluted to 100 times then the change in e.m.f.
(a) Increase of $59mV$
(b) Decrease of $59mV$
(c) Increase of $29.5mV$
(d) Decrease of $29.5mV$

59. If hydrogen electrode dipped in 2 solution of $pH = 3$ and $pH = 6$ and salt bridge is connected the e.m.f. of resulting cell is
(a) 0.177 *V* (b) 0.3 *V*

(c) 0.052 *V* (d) 0.104 *V*

60. The tendency of an electrode to lose electrons is known as
(a) Electrode potential
(b) Reduction potential
(c) Oxidation potential
(d) e.m.f.

61. When electric current is supplied through an ionic hydride of fused state, then
(a) Hydrogen is obtained at anode
(b) Hydrogen is obtained at cathode
(c) No change
(d) Hydride ion moves towards cathode
(e) hydride ion present in solution