



WORKSHEET-32(CLASS-12)

TOPIC- ELECTROCHEMISTRY

SUBTOPIC- ELECTROCHEMICAL CELL

SUBJECT – CHEMISTRY

DURATION – 30 mins

F.M. - 15

DATE -29.06.20

1.1 Which among the following is not a component of salt bridge?

- (a) KCl (b) KNO₃ (c) MgCO₃ (d) NH₄NO₃

1.2 The unit of Standard electrode potential is-

- (a) Siemens (b) Amp (c) Ohm (d) Volt

1.3 The value of cell constant for a cell-

- (a) Is constant (b) Can't be predicted (c) May change (d) None of these

1.4 The Nernst equation is useful for determining-

- (a) Electrode potential of a cell (b) Equilibrium constant (c) Both a and b (d) None of these

1.5 The feasibility of a cell reaction depends on-

- (a) $E_{\text{cell}} = 0$ (b) $E_{\text{cell}} > 0$ (c) $E_{\text{cell}} < 0$ (d) Can't be predicted

1.6 $E_{\text{Cell}}^{\ominus} = 1.1\text{V}$ for Daniel cell. Which of the following expressions are correct description of state of equilibrium in this cell?

(a) $1.1 = K_c$

(b) $\frac{2.303RT}{2F} \log K_c = 1.1$

(c) $\log K_c = \frac{2.2}{0.059}$

(d) $\log K_c = 1.1$

1.7 The value of $(2.303 \times RT/F)$ at 298K temperature-

- a) 0.519 b) 0.905 c) 0.509 d) 0.059

1.8 The Lowest electrical conductivity of the following aqueous solutions is of-

- (a) 0.1 M acetic acid (b) 0.1 M chloroacetic acid (c) 0.1 M fluoroacetic acid (d) 0.1 M difluoroacetic acid

1.9 The liquid media used inside a salt bridge is-

- a) Agar-agar gel b) water c) Ethanol d) Dimethyl ether

1.10 The value of standard hydrogen electrode potential is-

- a) 0V b) 0.059V c) 0.015V d) 5.29V

1.11 Simple Voltaic cell is an example of-

- a) Electrochemical cell b) Electrolytic cell c) Both a and b d) None of these

1.12 Voltmeter is an example of-

- a) Electrochemical cell b) Electrolytic cell c) Both a and b d) None of these

1.13 The difference between the electrode potentials of two electrodes when no current is drawn through the cell is called-

- a) Cell potential b) Cell e.m.f c) Potential difference d) Cell voltage

1.14 Electrode potential of a cell is-

- a) An intensive property b) Extensive property c) Both a and b d) can't be predicted

1.15 With increase in standard reduction potential, the oxidizing power-

- a) Increases b) Decreases c) Remains same d) can't be predicted

PREPARED BY: MR. ARNAB PAUL CHOWDHURY