

GIRLS' HIGH SCHOOL AND COLLEGE

2020-2021

Class XII A & B

CHEMISTRY

WORKSHEET NO. -7

Note: - 1. Parents please ensure that your ward refers to the prescribed book.

2. Answer the questions in your chemistry notebook.

Reference Books – Nootan ISC Chemistry- Vol II Class XII – Dr. H.C. Srivastava

Chapter - Electrochemistry

Topic – a). Electrolytic Conductance

b). Variation of Molar Conductivity with concentration

c). Commercial Cells

- Q1) a). What is meant by Cell Constant?
- b). Express mathematically the relationship between resistance, specific conductivity and cell constant.
- c). What is the effect of decrease in concentration on the molar conductivity of a weak electrolyte?
- Q2). A current of 1.5A is passed for 10 minutes through a solution of copper sulphate. What is the mass of copper deposited at the cathode? (At. Wt. of Cu = 63.5)
- Q3). State Kohlrausch Law for electrical conductance of an electrolyte at infinite dilution.
- Q4). a). How many Coulombs are required to produce 40g of aluminium from Al_2O_3 .
- b). The resistance of 0.01N NaCl solution is 200Ω at 25°C . Cell Constant of the conductivity cell is unity. Calculate the equivalent conductance of the solution.

- Q5). a). State Faraday's Second Law of Electrolysis.
- b). Define
- i). Electrochemical Equivalent
- ii). Equivalent Conductivity
- Q6). a). What is corrosion? What are the factors which govern corrosion?
- b). What do you understand by sacrificial protection?
- c). Write the cell reactions which occur in lead storage battery.
- i). When the battery is in use.
- ii). When the battery is on charging.
- d). Why tin protects copper more efficiently as compared to iron?
- Q7). Do Q. No. 3.42 on page 159 from your prescribed book.
- Q8). Do Q. No. 3.56 on page 165 from your prescribed book.
- Q9). Do Q. No. 3.65, 3.69 on page 173 from your prescribed book.
- Q10). Do Q. No. 3.77, 3.79 on page 181 from your prescribed book.
- Q11). Do Q. No. 23 on page 206 from your prescribed book.
- Q12). Do Q. No. 28,33,36(a) on page 207 from your prescribed book.
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