

Roll No.....

B.Sc Msc CHEMISTRY
SCLS JAMIA HAMDARD
SEMESTER III EXAMINATION 2020
PAPER CODE; BCH-CC10TH
PAPER TITLE; ELECTROCHEMISTRY

Time; 3h

Maximum Marks;75

Q.1 Explain very briefly of the following;

1.5x10=15

- i. What is electrolytic conductance?
- ii. What is metallic conductance?
- iii. Write Debye-Huckel equation?
- iv. What is voltaic cell?
- v. Give relationship between EMF & chemical equilibrium.
- vi. What is magnetic permeability?
- vii. What is paramagnetism?
- viii. What is dipole moment?
- ix. What is dielectric constant?
- x. How will you represent a galvanic cell on paper?

Q.2 Answer *any one* out of two in details

15

- i. Explain any two methods to determine transport number.
- ii. Explain Arrhenius theory of strong and weak electrolytes.

Q.3 Answer *any one* out of two in details

15

- i. Explain the Nernst equation and its application.
- ii. Derive Debye-Huckel-Onsager equation.

Q.4 Answer *any one* out of two in details

15

- i. Derive Clausius-Mossotti equation.
- ii. Explain molecular polarizability and its determination.

Q.5 Answer *any one* out of two in details

15

- i. Differentiate between paramagnetism & ferromagnetism.
- ii. Why cation of second group does not precipitate in group IV cation analysis?

.....X.....