

SEM-2215

M. Sc. (Fourth Semester) Examination, June 2021

CHEMISTRY

Paper : VIII (MCH-511) (Optional-IV)

(Electrochemistry)

Time Allowed : Three hours

Maximum Marks : 80

Note: Attempt all questions. Each question carries equal marks.

1. Illustrate physical interpretation of Carnot efficiency factor in electrochemical energy converters.
2. What do you know about the civilization and surface mechanism of the corrosion of the metals? Explain electrochemical method for measurement of corrosion rate.
3. Give a detail account of protonic electrochemical mechanism of nervous systems and enzymes used as electrodes.
4. Mention atleast two methods of determining kinetic parameters for quasi-reversible and irreversible waves.
5. What is cyclic voltammetry? Give its theory and applications.