R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY

R.S.M. Nagar, Puduvoyal – 601 206.

DEPARTMENT OF SCIENCE & HUMANITIES

Online Course Title	Electrochemistry
Faculty attended	S. Absara Fdo & S. Jothilakshmi
Learning Outcome	To know terminologies involved in electrochemistry, concepts and applications of electrochemical cells
Summary / Content of the programme	➢ This course dealt with the concepts of electrochemical and electrolytic cells and the terminologies involved in them. Detailed explanation about the types of cells, namely primary batteries, secondary batteries and flow batteries were discussed. Lechlanche's cell, its advantages, disadvantages and modifications were dealt in detail. Commercial applications and latest advancements we gave an outline about oxidation, reduction, different electrochemical cells, the electrons lost and gained during the electrochemical reactions. The representation of cell with which the standard electrode potential was also discussed in detail. A simple way to balance equations is also explained in detail. ➢ The electrochemical series which are arranged in the decreasing order of reduction potential with various examples are dealt in detail. He also explained that the best reducing agent will possess lower standard reducing potential and the best oxidizing agent possess higher oxidation potential which helps us to find the oxidising or reducing ability of different elements. Highlighted more about the two faraday's law of electrolysis . ➢ Then he discussed corrosion which is the basic problems in industries with machineries and methods imparted to reduce corrosion. The next topic was an outline of batteries. He explained about primary, secondary, fuel cells. In primary battery he explained the anodic , cathodic and overall reactions of dry cells. ➢ In secondary battery the anodic, cathodic and overall reactions of lead acid battery was explained. Also discussed about the cell reactions of fuel cells. He concluded the session by working out more numerical problems related to faraday's law and emf value calculation.
Suggestions / comments of Faculty	The Content and Presentation is Excellent.