

## Fuel Cell Technology

B. E. Chemical Engineering + M.B.A. 4<sup>th</sup>/8<sup>th</sup> Semester

Time Allowed 1 Hour.

Max. Marks 20

1. Why we use the term half-cell reaction in electrochemistry and how we will identify cathode and anode in a fuel cell? Give one examples of fuel cell reaction and identify which reaction is the cathode reaction and which reaction is the anode reaction.
2. Explain briefly with the help of mnemonic diagram, how energy can be transferred in a fuel cell from one form to another?
3. Why charge transfer reaction have an activation energy?
4. Why we need characterization of fuel cells? Explain briefly one in-situ characterization technique.