

MID SEMESTER EXAMINATION 2019

B. Tech. (VIII Sem) Polymer Science & Chemical Technology
PT 420: Fuel Cell Technology

Time: 1.5H

Max. Marks: 25

Note: Attempt all the questions. All question carry equal marks. Assume missing data, if any.

1. Explain that electricity generation using Fuel cell is more efficient than thermal generators. Give a brief account of the fuels that can be used in a fuel cell.
2. What are the main components of a fuel cell, give detailed account of each? Explain the working principle of fuel cell.
3. How many types of fuel cell are known? Discuss the mechanism of electrode reactions.
4. What do you understand by double layer? Explain Helmholtz model of double layer formation.
5. Describe the advantages and disadvantages of fuel cells. Explain the main characteristics of alkaline fuel cell.