**Assignment 2 (Module 2)**

**2 Marks**

1. Mention the applications of solar cells?
2. What is Fermi level?
3. Define doping of semiconductors?
4. Define LUMO and HUMO w.r.t energy band?
5. Differentiate open circuit and short circuit?
6. Mention any two drawbacks of solar cells?

**5 Marks**

1. What are the advantages and limitations of solar energy systems?
2. Explain the types of solar cells?
3. What is organic photovoltaics? Mention any two problems associated with them?
4. Explain the working principles of Solar cell power plant?
5. Explain the generations in solar cell development?
6. Discuss about the solar units and arrays?
7. What is a PN junction? What are its characteristics?
8. What are the effects of cell temperature on cell efficiency?
9. Compare and contrast between p-n cells, Si cells, and thin film cells?
10. Explain the photovoltaic effect with a neat sketch?
11. Explain any three types of Silicon PV cells?
12. Discuss the evolution of solar cells?