**SECTION-A**

**Answer All Questions: (6 x 1 = 6M)**

1. a) List any two renewable sources of energy. **(Remember)**

b) Write the chemical balance equation governing the fuel cell operaion. **(Remember)**

c) What is meant by Bio Mass? **(Remember)**

d) Define photo voltaic effect. **(Remember)**

e) List down some applications of solar energy. **(Remember)**

f) Draw the IV curve of solar cell and mark open circuit voltage and short circuit current on the curve. **(Remember)**

**SECTION-B (1x 6 = 6M)**

1. Compare Renewable and Conventional Energy sources in at least 8 aspects. **(Analyze)**

**(OR)**

1. Explain the working of Hydrogen – Oxygen fuel cell. What are the factors that affect the power output of a fuel cell? (**Understand)**

**SECTION-C (1 x 6 = 6M)**

1. a) Explain briefly the equivalent circuit for solar cell. (**Understand)**

**b)** Explain briefly the different characteristics of Solar cell. (Understand)

**(OR)**

1. Explain the effect of shunt and series resistance parameters on the solar cell performance. **(Understand).**

**SECTION-A**

**Answer All Questions: (6 x 1 = 6M)**

1. a) List any two renewable sources of energy. **(Remember)**

b) Write the chemical balance equation governing the fuel cell operaion. **(Remember)**

c) What is meant by Bio Mass? **(Remember)**

d) Define photo voltaic effect. **(Remember)**

e) List down some applications of solar energy. **(Remember)**

f) Draw the IV curve of solar cell and mark open circuit voltage and short circuit current on the curve. **(Remember)**

**SECTION-B (1x 6 = 6M)**

1. Compare Renewable and Conventional Energy sources in at least 8 aspects. **(Analyze)**

**(OR)**

1. Explain the working of Hydrogen – Oxygen fuel cell. What are the factors that affect the power output of a fuel cell? (**Understand)**

**SECTION-C (1 x 6 = 6M)**

1. a) Explain briefly the equivalent circuit for solar cell. (**Understand)**

**b)** Explain briefly the different characteristics of Solar cell. (Understand)

**(OR)**

1. Explain the effect of shunt and series resistance parameters on the solar cell performance. **(Understand).**