

|  |  |  |
| --- | --- | --- |
| Class: **IV/IV B.Tech** | **I Mid-term Examinations** | Date :28/08/2019 |
| Branch: **EEE** | **NEW & RENEWABLE ENERGY SOURCES** | Time :**90 Min** |
| Sub Code: **EE-415** |  | Max. Marks :**18** |

**SECTION-A**

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

1. a) List any two renewable sources of energy. (PO 6, 7) (CO 1) **(Understand)**

b) What is the approximate amount of total power generation in India? (PO 6, 7) (CO 1, 2, 5) **(Understand)**

c) What is wind power? (PO 1, 6, 7) (CO 1, 5) **(Understand)**

d) Mention two important wind turbine generator installations in India? (PO 1, 6, 7) (CO 1, 5) **(Understand)**

e) What is meant by Biomass? (PO 1, 6, 7) (CO 1) **(Understand)**

f) Write any four differences between renewable and Non-Renewable Sources. (PO 1, 6, 7) (CO 1, 2, 5) **(Understand)**

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

1. What is thermo electric generator? Explain its principle of operation and working. (PO 1,6,7,12) (CO 1) **(Apply)**

**(OR)**

1. What is MHD? What is the principle behind its working? How it works (PO 1,6,7,12) (CO 1) (**Understand)**

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

1. Draw the characteristics of solar cell and explain about Short Circuit Current Open Circuit Voltage, Fill Factor Efficiency of a solar cell. (PO 1,6,7) (CO 2) **(Understand)**

**(OR)**

1. Explain the effect of shunt and series resistance parameters on the solar cell performance (PO 1,6,7) (CO 1,2,3) **(Understand).**

Signature of Faculty

(Mr.G.Satish)