



M 26858

Reg. No. :

Name :

**VIII Semester B.Tech. Degree (Reg./Supple. – Including Part Time)
Examination, April 2015
(2007 Admn. Onwards)**

PT2K6/2K6 EE 804 : ENERGY TECHNOLOGY

Time : 3 Hours

Max. Marks : 100

Instruction : Answer all questions.

- I. 1) What do you mean by carbon credit ?
2) Discuss the needs of energy auditing.
3) Write a short note on LED lighting systems.
4) Explain what do you mean by harmonic elimination.
5) How will you measure solar radiation ?
6) Distinguish between horizontal axis and vertical axis wind turbines.
7) What is the difference between induction generators and doubly fed induction generators ?
8) What do you mean by pack back period ? How will you calculate it ?

(8x5=40 Marks)

- II. 1) What do you mean by energy conservation ? Why it is required ? Discuss in detail.

OR

- 2) Explain in detail the steps for detailed energy audit.

15

- III. 1) Briefly discuss the energy efficient technologies in Electrical systems.

OR



2) Write short notes on

- a) SVC
- b) TCSC
- c) STATCOM.

15

IV. 1) Explain what do you mean by solar radiation ? What are the components of solar radiation ? Also discuss the effects of Earth's atmosphere on solar radiation.

OR

2) What are the advantages and disadvantages of small hydro power plants ? With a neat diagram explain the components of a small hydro power plant.

15

V. 1) Discuss briefly about the various types of generators for renewable power generation.

OR

2) With the help of a case study explain the financial evaluation of a renewable energy system.

15
