**Rajasthan Institute of Engineering & Technology, Jaipur.**

**II Mid Term examination**

**Session: 2017-18**

**Semester & Branch-VIII & Mechanical**

**Subject with code- POWER GENERATION (8ME3A)**

Time: 2 hrs. SET-A M.M.:20

**Instructions to Candidates: -**

**Attempt all questions. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.**

Q1 Discuss the advantages and disadvantages of wind power generation over conventional systems.

OR

Q1. What is an aero foil? Explain its importance in wind power generation?

Q.2 Write short notes on:

(a) Applications of wind energy (b) Savonius rotor

OR

Q.2 Describe vertical axis type aerogenerators.

Q.3 Explain the various factors contributing to losses and hence reduction of Efficiency of solar cell.

OR

Q.3 Define solar constant? Explain Beam and Diffuse Radiation.

Q.4 What do you mean by PV modules and explain the solar cell, PV modules and PV array.

OR

Q.4 Draw a neat diagram of simple flat plate collector and describe the function of FPC?