**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-B 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 Describe the main considerations in selecting a site for wind generators.

OR

Q1. Define lift and drag and explain the importance of these factors in wind power generation.

Q.2 Write short notes on:

(a) Darrius rotor (b) Wind energy storage

OR

Q.2 Describe horizontal axis type aerogenerators.

Q.3 What are the advantages and disadvantages of concentrating collectors over flat plate collectors.

OR

Q.3 Explain the principle of conversion of solar energy into heat.

Q.4 What are the main applications of a solar pond? Describe briefly.

OR

Q.4 What are the advantages and disadvantages of photovoltaic solar energy conversion?