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Total No. of Pages : 01

Total No. of Questions : 08

**M.Tech.(Power System) (E-I 2013) (Sem.-2)****RENEWABLE ENERGY RESOURCES**

Subject Code : MTPS-204C

Paper ID : [A2518]

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries equal marks.

- Q.1. What is cogeneration? What are prospects of renewable energy sources? Explain the GHG impact of conventional power generation system in brief for each type of generation.
- Q.2. Explain the principle, construction and application of direct solar power generation. Compare solar thermal power generation system. Explain in details.
- Q.3. What are constraints of commercialization of wind power generation? What are methods of wind power generation system? What are wind power storage systems? Explain.
- Q.4. Write the procedure for wind power estimation process in detail. What are constraints of wind power with grid interfaces?
- Q.5. What types of wind turbines are used for power generation? Compare them.
- Q.6. Draw neat diagrams and explain for tidal Power generation system. List out it's constrains of generation in India with suggestion.
- Q.7. Explain the principle and operation of Hydrogen Cartridge. Write down its merits and demerits also.
- Q.8. Write short notes on :
- (a) Classification of fuel cells.
  - (b) MHD energy generation.
  - (c) Geo thermal power.
  - (d) Wave energy