

**DIPLOMA IN ELECTRICAL ENGINEERING
(DELVI)**

Term-End Examination

June, 2011

BIEE-029 : POWER GENERATION SYSTEM

Time : 2 hours

Maximum Marks : 70

Note : Question number 1 is compulsory. Attempt any four from remaining questions. All questions carry equal marks.

1. (a) _____ plants have the minimum running cost. **2x7=14**
- (b) The pH value of water used for boiler is _____.
- (c) The MHD system generates _____ energy.
- (d) The capital cost per Mega Watt is highest in case of _____ plant.
- (e) The over all thermal efficiency of a thermal power plant lies in the range _____ to _____.
- (f) _____ is a basic building block to generate electricity in Solar System.
- (g) In which place induced draft fans are located in the cooling tower.
- (a) The top
- (b) The bottom
- (c) In the middle
- (d) Can be anywhere in the cooling tower.

2. (a) Write down the application and characteristics of storage battery ? 7
(b) Describe the design and operation of fuel cell ? 7
 3. (a) Describe the Prime movers for geo thermal conversion ? 7
(b) What is Bio energy ? 7
 4. (a) Describe the main parts and working of Steam Power Station. 7
(b) What are the types of steam turbine ? 7
 5. (a) Discuss different application in brief for Solar System. 7
(b) Describe the different types of energy storage. 7
 6. (a) How are hydel plants are classified ? Explain them. 7
(b) What are the factors of selection of site for Hydro Electric Station ? 7
 7. (a) Discuss various non conventional sources of energy. 7
(b) Describe briefly Flow diagram and their operation of power generation. 7
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