

00323

**DIPLOMA ELECTRICAL ENGINEERING
(DELVI)/ADVANCED LEVEL CERTIFICATE
COURSE IN ELECTRICAL ENGINEERING
(ACELVI)**

Term-End Examination

December, 2012

BIEE-029 : POWER GENERATION SYSTEM

Time : 2 hours

Maximum Marks : 70

- Note :**
- (i) *Question no. 1 is compulsory.*
 - (ii) *Attempt any four out of seven questions.*
 - (iii) *All questions carry equal marks.*
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1. (a) Which of the following is usually not the generating : **7x2=14**
- (i) 6.6 kV
 - (ii) 9.9 kV
 - (iii) 11 kV
 - (iv) 13.2 kV
- (b) Larger industrial consumers are supplied power at :
- (i) 400 kV
 - (ii) 11 kV
 - (iii) 66 kV
 - (iv) 132 kV

- (c) Maximum generating capacity in India _____.
- (d) MHD generation is non renewable source of energy. (True/False)
- (e) For low head _____ turbine is used.
- (f) For high head low axial thrust _____ turbine is used.
- (g) Which moderator is used in fast breeder reactor _____.
2. (a) Explain flow diagram of thermal power plant and their operation in brief. 7
- (b) Comparison between hydro and nuclear power plant on the basis of running cost, site, maintenance. 7
3. (a) What are the requirement for site selection in hydro power plant ? 7
- (b) Differentiate Mini and Micro hydro-electric power generation with application. 7
4. (a) Explain performance of thermo-electrical power generation in India. 7
- (b) Explain boilers used in thermal power plant with general layout. 7

5. (a) Explain different types of solar collector with neat sketches. 7
- (b) Compare Solar and Wind energy. 7
6. (a) What are the different types of Bio-mass conversion technology ? Explain with neat sketches. 7
- (b) Explain Geothermal Plant. 7
7. (a) What are the different tidal power generation in India ? 7
- (b) Explain with comparison open, closed and hybrid cycle in OTEC. 7
8. (a) Explain principle of chemical power generation and its major applications. 7
- (b) Explain different types of battery used in chemical energy source. 7
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