BIEE-029

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

02265

Term-End Examination

June, 2012

BIEE-029 : POWER GENERATION SYSTEM

Time : 2 hours   *Maximum Marks : 70*

Note : *Question number 1 is compulsory. Attempt any four out of seven questions. All the questions carry equal marks.*

1. (a) Hydro Power Plant is more costly than nuclear Power Plant (True / False)   7x2=14

    (b) The connected load of a consumer is 2 kW and his maximum demand is 1.5 kW. The load factor of the consumer is :

        (i) 0.75   (ii) 0.375

        (iii) 1.33   (iv) None

    (c) The maximum demand of a consumer is 2 kW and his daily energy consumption is 20 units. His load factor is :

        (i) 10%   (ii) 41.6%

        (iii) 50%   (iv) None of the above

(d) The Standard Voltage for Generation in India is _____.

(e) Overall efficiency of any plant is given as _____.

(f) Maximum efficiency of thermal Power Plant is _____

(g) Define Tarrifin brief.

2. (a) Importance of non - conventional sources of energy in the present scenario. 7

(b) Draw the flow diagram of any non conventional source and explain it. 7

3. (a) Explain with neat diagram, principle of MHD Power Generation. 7

(b) Explain hydro Power Plant with neat diagram. 7

4. (a) What are the different materials used in thermal plant ? Explain application. 7

(b) What are ID and FD, that is used in thermal plant ? Draw the diagram. 7

5. (a) Derive power relation in wind Power Generation. 7

(b) Explain principle of solar PV cell. 7

6. (a) Explain the term Wind mills, solar cookers, solar water heater. 7

   (b) Explain different types of solar energy cell with neat sketches. 7

7. (a) Explain different method of Biomass. 7

   (b) Explain principle of OTEC and its type. 7

8. (a) Explain principle of fuel cells in detail. 7

   (b) Explain present scenario of NCER and future scope. 7

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