

EMS 1108 - Self Study Course-I

P. Pages : 1

Time : Three Hours



GUG/W/16/3832

Max. Marks : 70

- Notes :
1. All questions carry equal marks.
 2. Answer **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answers wherever necessary with the help of net sketches.
 6. Use of Non-programmable calculator is permitted.

1. a) What do you mean by energy crises? Discuss about the possible solutions for energy crises in India. 7
b) Discuss the main features of National tariff policy? 7
2. a) What is the impact of energy subsidies on the economy? 7
b) What is an energy subsidy? Discuss about energy subsidies in India. 7
3. a) Design PV water pumping system. 7
b) What are commonly used algorithms for MPPT? Give the flow chart of a P & O MPPT algorithms. 7
4. a) Design PV systems for residential and industrial applications. 7
b) Describe in brief, the different energy storage methods used in the solar system. 7
5. a) How are WECS system classified? Describe in brief. 7
b) Describe the main consideration in selecting a site for wind generators. 7
6. a) Name the various models of Biogas plant. 7
b) What are the factors, which affect the size of the Bio-gas plant. 7
7. a) What is the present trend in diesel research. 7
b) What are the various load characteristics that influence the efficient use of DG set. 7
8. a) List the energy saving opportunities in an Industrial DG set plant. 7
b) What do you mean by Co-generation & trigeneration? What is the need of Co-generator? 7
