

GUESS QUESTION-2023

SUB-ENERGY CONSERVATION AND AUDIT

UNIT-01

1. What do you mean by energy conservation? Write in short.
2. State four salient features of energy conservation Act 2001.
3. Write about the function and working of following
 - a) Bureau of Energy Efficiency(BEE)
 - b) Maharashtra Energy Development Agency(MEDA).
4. What is the star labelling? State its need and benefits.

UNIT-02

1. Describe the need of energy conservation in Induction motor.
2. Explain the following energy conservation methods of induction motor
 - a) Rewinding of motor
 - b) Operating in star mode.
 - c) Improve power quality.
3. State any two energy conservation techniques in transformer.
4. Explain variable frequency drive(VFD).
5. Explain the working principle of automatic power factor controller.
6. Explain amorphous core transformer and epoxy resin cast (dry) transformer with respect to energy conservation.

UNIT-03

1. State commercial losses in transmission system and distribution system. Also state remedies for the same.
2. State four causes of technical losses in transmission and distribution system. Also state technique to reduce it.
3. Explain the working principle and operation of kVAR.
4. State the function of Automatic Power Factor Controller(APFC).
5. Explain the two methods of energy conservation in lighting system.

UNIT-04

1. Give classification of co-generation system on the basis of sequence of use of technology.
 2. With neat diagram explain the following terms
 - a) Steam turbine co-generation system.
 - b) Gas turbine co-generation system.
 3. What are the advantages of co-generation system?
 4. State different types of tariffs.Explain any four tariff in detail.
- Or:- Define the following tariffs: Time-off day tariff and Peak-off day tariff.
5. Describe maximum demand tariff and power factor tariff.

UNIT-05

1. What are the advantages of energy audit?
2. Explain all types of energy audit instrument and their uses?
3. What is energy flow diagram ? Explain with neat diagram.
4. Explain the procedure to calculate the payback period. Also state its significance.