

B. E. SEM VIII (ELECTRICAL ENGINEERING) Question Bank

(Energy Efficiency in Utilities)

All questions carry equal marks(10 marks)

Q.1	Explain the concept of co-generation and its applications.
Q.2	Describe the various principles of Energy conservation task in industry.
Q.3	Explain various methods of Energy Conservation in Cooling Towers.
Q.4	Explain various methods of energy conservation in cement.
Q.5	Explain various methods of energy conservation in textile.
Q.6	Explain various methods of energy conservation in sugar.
Q.7	Explain various methods of energy conservation in house.
Q.8	Explain various methods of energy conservation in multistorey building.
Q.9	Explain the various methods to improve efficiency of the induction motor.
Q.10	Describe various techniques for determining motor loading.
Q.11	Describe: "Field tests for determining efficiency".
Q.12	How can the concept of variable frequency drives conserve energy?
Q.13	Explain various factors for successful implementation of variable speed drives.
Q.14	Where can one implement the variable speed drive? What is the format for data record and analysis for the same?
Q.15	Describe various methods of Energy Conservation in Pumps.
Q.16	Explain in detail various methods of Energy Conservation in Compressors.
Q.17	Describe various methods of Energy Conservation in Blowers.
Q.18	What is Maximum demand controller? Explain with diagram.
Q.19	What is Automatic power factor controller? Explain in detail.
Q.20	Compare Energy efficient motors and normal motors?
Q.21	What is the characteristics of energy efficient motors? Explain in detail.
Q.22	Compare Soft starters with energy saver.
Q.23	What is Energy efficient transformers? Explain in detail.
Q.24	What is electronic ballast & occupancy sensors? Explain in detail.

Q.25	Classify energy efficient lightning controls. Describe any one in detail.
Q.26	Explain various methods of energy saving in transportation system especially electric vehicle.
Q.27	Explain various methods of energy saving in air conditioning system.
Q.28	Compare Energy Conservation and Energy Saving.
Q.29	Describe energy conservation in air conditioning system.
Q.30	What are the observations during the utility time for the energy saving of an electric motor?
Q.31	How can a designer save energy at the design stage for proto-type design of an electric motor?
Q.32	What are the rules of selection of a dc motor & ac motor?
Q.33	What are the rules for the selection of a pump set? Explain in brief.
Q.34	What are the rules for the selection of an air conditioner to save energy? Explain in detail.
Q.35	Explain the procedure to save the energy of a lighting system.
Q.36	Explain various methods to conserve energy at Shopping Mall.