

Chapter Objective

1. To be able to understand the need for hybrid energy system.
2. To be able to build hybrid energy systems for a given application.

Chapter Motivation

As each of the renewable energy sources are not available continuously and at the same energy levels, hybrid source utilization is the future solution.

Sample Questions

1. Why are hybrid energy based systems needed?
2. Give some examples of hybrid energy systems that you see in every day life?
3. Compare the three water heating systems – one which is based on electric grid alone, one that is based on solar thermal collectors and one that is based on a combination of electric grid and solar thermal collectors.
4. Draw the block schematic of a hybrid electric vehicle. What are the different hybrid energies are used?
5. What are the advantages and disadvantages of hybrid energy based systems?