

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

SEMESTER: 5TH (CSE/IT)

SUBJECT: ENERGY RESOURCES AND MANAGEMENT

PAPER CODE: MC-904 A

Time allowed: 3 hrs

Max. Marks: 100

Note: Attempt 75% of the total marks. Each question carries equal marks.

- Q.1** Define energy. Explain need of energy. Classify the different energy resources and discuss different renewable & non- renewable sources of energy. **(20)**
- Q.2** Explain the factors which are considered in the site selection of Thermal power plant? Explain its working with the help of neat and clean diagram. Also write its advantage & disadvantage. **(20)**
- Q.3** How can geothermal energy be utilized for electricity generation? What are the applications, advantages, and disadvantages of geothermal energy? **(20)**
- Q.4** Explain the working of Hydropower generation with neat and clean diagram. **(20)**
- Q.5** Explain the factors considered in the site selection of Nuclear power plant. Also explain its working with the help of neat and clean diagram. Discuss its advantages and disadvantages. **(20)**
- Q.6** Explain the factors which are considered in the site selection of Solar power plant? Explain its working with the help of neat and clean diagram. Also write its advantage & disadvantage. **(20)**
- Q.7** Describe the objective of energy management. What are the managerial functions involved in energy management? What are the various steps in the implementation of energy management in an organization? **(20)**
- Q.8** What is an energy audit? Explain briefly the difference between preliminary and detailed energy audits? **(20)**
