

B.E. / B.Tech. Electrical (Electronics & Power) Engineering (Model Curriculum) Semester-VI
TE204B / ENERGY1 - Energy Resources and Environment

P. Pages : 2

Time : Three Hours



GUG/S/25/13878

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Illustrate your answers wherever necessary with the help of neat sketches.
 5. Use of slide rule, Logarithmic tables, Steam tables, Mollier's chart, Drawing instruments, Thermodynamic tables for moist air, Psychrometric charts and Refrigeration charts is permitted.
 6. Non programmable calculator is permitted.

1. a) Discuss energy consumption as the measure of prosperity and state energy and population sharing between developed and developing nation. **8**

b) Write short note on Biomass and wind power generation. **8**

OR

2. a) State indirect methods of utilizing solar energy and discuss anyone in detail. **8**

b) Explain the sources of alternate energy sources. **8**

3. a) Write a short note on. **8**

i) Acid rain

ii) Ozone depletion

b) Explain environmental aspect on conservation of non-renewable energy sources. **8**

OR

4. a) Explain the need of energy conservation with its benefits. **8**

b) Discuss the international energy policies in India. **8**

5. a) Describe in detail commercial and non-commercial sources in India. **8**

b) Describe bio-fuels utilization pattern in past, present, future. **8**

OR

6. a) What are the renewable and non-renewable sources of energy? Why is conservation is required. **8**

b) State and explain the importance of energy conservation policy. **8**

7. a) Explain the framed concepts of the features of Energy Conservation Act 2001. 8
- b) Explain the roles of BEE. 8

OR

8. a) Discuss powers and functions of state and central government under energy conservation Act-2001. 8
- b) Write a short note on NPC. 8
9. a) Discuss global energy issues in India. 8
- b) Discuss industrial energy policies in India. 8

OR

10. a) Discuss how humans are responsible are responsible for energy consumption and unnecessary wastage of energy. 8
- b) Discuss national and state level policies in India. 8
