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Model Question Paper (CBCS) with effect from 2015-16
Sixth Semester B.E. Degree (CBCS) Examination
Energy Auditing

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

MODULE – I

- 1** **a** Explain the need for energy management. (08 Marks)
 b Review the energy scenario in India in brief. (08 Marks)

OR

- 2** **a** What is Energy Performance Contracts? Elaborate the need for energy audit in industries. (08 Marks)
 b Interpret the method of evaluation of energy conservation opportunities. (08 Marks)

MODULE – II

- 3** **a** Explain briefly the difference between preliminary and detailed energy audits (08 Marks)
 b Describe the energy management approach that one should adopt. (08 Marks)

OR

- 4** **a** What is an energy audit? Explain its need. (06 Marks)
 b Give a brief about the various energy auditing instruments. (10 Marks)

MODULE – III

- 5** **a** What do you understand by energy management? Elaborate the various elements of Energy Management Program (EMP) (08 Marks)
 b List the various duties of Energy Manager. (08 Marks)

OR

- 6** **a** Explain the need for energy management in our country. (08 Marks)
 b Write a short note on monitoring and targeting. (08 Marks)

MODULE – IV

- 7** **a** How can energy conservation in boiler systems be achieved? Explain the measures. (09 Marks)
 b What are the benefits of WHR? Explain any two devices. (07 Marks)

OR

- 8** **a** What are the advantages of using insulation? Write a short note on Economic Thickness of Insulation (ETI). (08 Marks)
 b Elaborate the energy conservation measures in steam systems in detail. (08 Marks)

MODULE – V

- 9** **a** Explain the need for reactive power management? How is it achieved? Explain (08 Marks)
 (i) HVDC (ii) FACTS
 b What are Energy Efficient Motors (EEM)? What measures are adopted to reduce the various losses in EEM. (10 Marks)

OR

- 10** **a** What is DSM? Explain the various strategies of DSM. (08 Marks)
 b Interpret the possible energy conservation measures that can be adopted in fans. (08 Marks)

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
 2. Any revealing of identification, appeal to evaluator and /or equations written e.g. 38+2 = 40, will be treated as malpractice.