

CBCS SCHEME

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15ME562

Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019

Energy and Environment

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. List and explain the different forms of energy. (06 Marks)
b. Explain briefly the key energy trends in India. (10 Marks)

OR

- 2 a. Discuss briefly the demand and consumption of coal in India. (06 Marks)
b. Explain briefly the factors affecting India's energy development. (10 Marks)

Module-2

- 3 a. Explain the following with one example : (08 Marks)
i) Sensible heat thermal storage system ii) Latent heat thermal storage system.
b. Discuss the energy conservation schemes. (08 Marks)

OR

- 4 a. What is Energy audit and its objectives? (08 Marks)
b. Discuss the steps to be followed in undertaking preliminary energy audit in an industrial company. (08 Marks)

Module-3

- 5 a. Explain with a suitable examples, multidisciplinary nature of environmental studies. (10 Marks)
b. Discuss the need for public awareness of environment management. (06 Marks)

OR

- 6 a. Explain the flow of energy through the various components of the eco system. [Producers, Consumers and Decomposers]. (08 Marks)
b. Explain the concept of ecological pyramids and food chains. (08 Marks)

Module-4

- 7 a. Discuss the major sources and effects of air pollution. (08 Marks)
b. Define Noise pollution. List the major sources and effects of noise pollution. (08 Marks)

OR

- 8 a. With a neat diagram, explain Municipal Solid Waste [MSW] Processing unit. (10 Marks)
b. Discuss the role of individual in pollution prevention. (06 Marks)

Module-5

- 9 a. Explain the phenomenon of global warming, factor contributing global warming and its effect. (10 Marks)
b. What is Acid rain? Explain the causes and effects of acid rain. (06 Marks)

OR

- 10 a. Write short notes on : (10 Marks)
i) The water [Prevention and control of pollution] Act ii) Environment Protection Act.
b. Explain how ozone layer depletion occurs. Discuss the impact of ozone depletion on human health. (06 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 eg. 42+8 = 50, will be treated as malpractice.