Printed Pages: CE-201

(Following Paper ID and Roll No. to be filled in your Answer Books)											
PAPER ID:	Roll No.										

### B.TECH.

# Theory Examination (Semester-II) 2015-16

## ENERGY, ENVIRONMENT AND ECOLOGY

Time: 3 Hours Max. Marks: 100

#### SECTION-A

Q1. Attempt all question parts

 $10 \times 2 = 20$ 

- a) What are the principles of environmental education?
- b) What are the structural components of an Ecosystem?
- c) Bring out the order of distribution of biodiversity throughout the world with reasons.
- d) What is organic farming?
- e) Mention the advantages & disadvantages of modern agriculture.
- f) What are the merits of using renewable energy resources?
- g) What are the sources effects of marine pollution?
- h) Bring out the reactions taking place at stratosphere.
- i) What is Forest Ecosystem
- j) What is Aquatic Ecosystem

#### SECTION - B

Q2. Attempt any five question parts

10 x 5=50

- a) Describe the types, characteristics features, structure& function of
- b) Discuss the consequences of overdrawing surface and Ground water.
- c) Write briefly about Geothermal Energy and Tidal Power.
- d) How can you, as an individual, prevent environmental pollution? Why such an effort at an individual level is important?
- e) Discuss about the Forest Act, 1980 and its amendments until date.
- f) With a neat flow diagram explain nitrogen cycle
- g) Explain the environmental damage caused by mining activities. Illustrate one case study.
- h) Give a comparative account of urban and industrial wastes in terms of their sources, characteristics and management and disposal methods.

#### SECTION -C

Attempt any two of the following questions

 $15x\ 2 = 30$ 

- Q3.a) What are tropic levels? Explain the flow of energy and minerals in ecosystem.
  - b) Discuss any one model of ecosystem with an example.
- Q4. Attempt the following
  - a) Discuss the possible solutions to improve the acceptability of dam projects in Indian conditions
  - b) What is biodiversity? How IS it classified? Explain the values of biodiversity.
- Q5. Attempt any two parts
  - a) Compare nuclear power and cold power.
  - b) Describe about Water Act 1974.
  - c) How drinking water is polluted and discuss the diseases associated with water.