

Code No: 124CW

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year-II Semester Examinations, May - 2017

ENVIRONMENTAL STUDIES

(Common to CE, ECE, CSE, EIE, IT, MCT, ETM, MMT, PTM, CEE, AME)

Time: 3 Hours**Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

PART-A**(25 Marks)**

- 1.a) Write the significance of biogeochemical cycle in pollution abatement. [2]
- b) Differentiate between terrestrial ecosystem and aquatic ecosystem. [3]
- c) What are the environmental effects of mineral extraction? [2]
- d) Summarize the major reasons for deforestation. List the ill effects of deforestation. [3]
- e) What is meant by species diversity? [2]
- f) Write the methodology involved in ex-situ and in-situ conservation of a species. [3]
- g) Identify the sources of noise pollution in rural areas. List out the health hazards of noise pollution. [2]
- h) What are the ambient air quality standards prescribed by central pollution control board in India? [3]
- i) How crazy consumerism affects the environment? [2]
- j) What are the salient features of wildlife protection act? [3]

PART-B**(50 Marks)**

2. Describe the components that make up the structural aspects and functional aspects of an ecosystem. [10]
3. Explain the mechanism involved in the energy flow between various components of an ecosystem. [10]
- 4.a) Describe the measures to be taken for the better management of available drinking water resources.
- b) Discuss the environmental impacts of building the water reservoirs and dams. [5+5]
5. Explain the sources, commercial applications and limitations of biomass energy. [10]
- 6.a) Enumerate the reasons and need for genetic diversity and ecosystem diversity.
- b) How the loss of biodiversity contributes to global climatic changes? [7+3]
- 7.a) Explain the ten major Biogeographic zones situated in India.
- b) With examples, discuss the social values of biodiversity. [7+3]

8. Describe the mechanism of polluting the soil by:
excess use of fertilizer, pesticides and excess salts. [10]
- OR
9. Explain the sources and ill effects of ozone layer depletion. Suggest few methods
to reduce the effect due to depleting ozone layer. [10]
- 10.a) Describe the sources and environmental impacts of municipal solid waste.
b). What are hazardous solid wastes? Give examples. [7+3]
- OR
11. Explain the characteristics, structure, stages and techniques used for
Environmental Impact Assessment (EIA). [10]

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