

**R15**

Code No: 126ZF

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, April - 2018****ENVIRONMENTAL STUDIES****(Electrical and Electronics Engineering)****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) Define ecosystem. [2]
- b) What is carrying capacity of an ecosystem? [3]
- c) List out living resources in terrestrial ecosystem. [2]
- d) Write about mining resources of Telangana. [3]
- e) What is species diversity? [2]
- f) What is a biosphere reserve? [3]
- g) What are primary pollutants? [2]
- h) List out secondary pollutants and explain production of any one of them. [3]
- i) What is ecological footprint? [2]
- j) Explain green building concept. [3]

**PART - B****(50 Marks)**

2. Write a detailed note on any one biogeochemical cycle of your choice. [10]

**OR**

3. Explain flow of energy in an ecosystem through food chain and food web. [10]

4. Explain how overutilization is threatening water security. Outline measures for mitigating it. [10]

**OR**

5. Explain how renewable energy sources will help in meeting the ever growing energy needs. [10]

6. Give a detailed account of value of biodiversity. [10]

**OR**

- 7.a) Give a note on insitu conservation of biodiversity.
- b) Write a note on national biodiversity act. How does it help in conservation and benefit sharing. [5+5]

8. There is evergrowing air pollution in the cities. Explain measures for its control. [10]

**OR**

9. Give an overview of e waste and its management. [10]

10. What is EIA? How does it help in sustainable development? [10]

**OR**

11. Write about ecological footprint and low carbon life style. [10]

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