

**R13**

Code No: 113AF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year I Semester Examinations, March - 2017

ENVIRONMENTAL STUDIES

(Common to ME, AE, MIE, AGE, MSNT)

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) What is meant by the term 'Pyramid of numbers' in ecology? [2]
- b) Why are our energy needs growing? [3]
- c) What is a biodiversity hotspot? [2]
- d) What is Kyoto protocol? [3]
- e) Write about the differences between consumerism and crazy consumerism. [2]
- f) 'Pyramids of energy are always upright' Why? [3]
- g) What are the problems associated with over utilization of ground water in coastal regions? [2]
- h) What is ecosystem diversity? [3]
- i) What is the purpose of waste water primary treatment? [2]
- j) What are the different disposal methods allowed for MSW according to MSW rules? [3]

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

- 2.a) What is the difference between bioaccumulation and biomagnifications? [5+5]
  - b) Describe about the carbon cycle. [5+5]
- OR**
- 3.a) Compare the pyramid of biomass between a tree ecosystem and a pond ecosystem. [5+5]
  - b) Why are the biogeochemical cycles important? [5+5]
- 4.a) Why is forest cover very important and what are its uses? [5+5]
  - b) List the problems associated with deforestation. [5+5]
- OR**
- 5.a) Give the salient features of National Biodiversity Act. [5+5]
  - b) Discuss about ex situ and insitu strategies for biodiversity conservation. [5+5]
- 6.a) Discuss about the threats to the biodiversity. [5+5]
  - b) What are the consumptive uses of biodiversity? [5+5]
- OR**
- 7.a) How does salt affect soils forms? [5+5]
  - b) What are the places identified as potential wind energy harvesting sites in India? [5+5]

- 8.a) What is climate change? How does it happen?  
b) What are the impacts of climate change and how can we mitigate the problem? [5+5]

OR

- 9.a) How does deforestation lead to desertification?  
b) Describe the low carbon lifestyle. [5+5]

- 10.a) How can we acquire the baseline data for carrying out EIA?  
b) Mention the MSW management and handling rules. [5+5]

OR

- 11.a) Mention the salient features of Forest Act.  
b) Give the concepts of green building. [5+5]

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