



**B.E/ B.TECH DEGREE EXAMINATIONS: MAY 2015**

(Regulation 2013)

Fourth Semester

**U13GST001:Environmental Science and Engineering**

(Common to ECE, CE, ME, EIE, MCT, BIO, FT & TXT)

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

- Choose the non – renewable source of energy from the following
  - Fuel cells
  - Wind power
  - Coal
  - Wave power
- Name the process of extraction of ores and minerals from the earth is.....
- Find the term Hot spot means
  - Very poor in species
  - Very rich in species
  - Very hot
  - Dangerous
- Recall the term biodiversity is said to be.....
- Which of the following is an air pollutant?
  - Oxygen
  - Hydrogen
  - Nitrogen
  - Carbon monoxide
- Find the unit used to measure the intensity of sound is.....
- Name the major compound responsible for the depletion of ozone layer is
  - CFC
  - CO<sub>2</sub>
  - CH<sub>4</sub>
  - O<sub>2</sub>
- Show the major effect of global warming in the polar region is.....
- Find the term mortality means
  - Immigration
  - Birth rate
  - Emigration
  - Death rate
- Name the cells which affects initially by HIV in the human body is.....

**PART B (10 x 2 = 20 Marks)**

**(Not more than 40 words)**

11. Define the term afforestation.
12. Infer the term water logging.
13. Distinguish between food chain and food web.
14. Define eco system.
15. List out any two impacts of marine pollution on aquatic life.
16. Define soil pollution.
17. Distinguish between sustainable and unsustainable development.
18. Define acid rain.
19. Outline the term population explosion.
20. List out any two main objectives of family welfare.

**PART C (5 x 14 = 70 Marks)**

**(Not more than 400 words)**

**Q.No. 21 is Compulsory**

21. Analyze briefly on the sources, effects and control measures of air pollution.
  
22. a) (i) Inspect the major arguments cited against the construction of dams. (7)  
(ii) Explain the adverse environmental impacts of modern agriculture. (7)  

**(OR)**

b) (i) Demonstrate briefly on land degradation and its impact to the environment. (7)  
(ii) Examine the environmental damages caused by mining last long after the mine has closed". (7)
  
23. a) (i) Categorize the role of producers, consumers and decomposers in an eco system. (7)  
(ii) Illustrate and explain briefly on the concept of ecological pyramids. (7)  

**(OR)**

b) (i) Interpret the status of "India as a mega diverse nation of biodiversity" (7)  
(ii) Explain briefly on conservation of biodiversity. (7)
  
24. a) (i) Classify and explain briefly on rain water harvesting and water shed management. (7)  
(ii) Infer the major issues associated with resettlement and rehabilitation. (7)

**(OR)**

- b) (i) Categorize the constitutional provisions in India for environmental protection. (7)
- (ii) Examine the phenomenon of global warming and its factors contributing to the both floras and faunas in the environment. (7)

25. a) (i) Summarize the evolution of women and child welfare programme in India. (7)
- (ii) Explain the environmental problems posed by population explosion. (7)

**(OR)**

- b) (i) Inspect the modes of transmission of HIV and how can it be prevented. (7)
- (ii) Summarize the salient features of the universal declaration of human rights by UN. (7)

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