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**Question Paper Code: 50028**

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Second Semester

Civil Engineering

15UCY207 - ENVIRONMENTAL SCIENCE

(Common to ALL Branches)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- Which of the following is an extinct species?
  - Red panda
  - Dugong
  - Dodo
  - Great Indian bustard
- The organism which lives in a particular habit is known as \_\_\_\_\_ species.
  - Endangered
  - Rare
  - Endemic
  - Vulnerable
- Which of the following is not an air pollutant?
  - Smoke
  - Nitrogen Gas
  - Carbon Dioxide
  - Sulphur Dioxide
- Identify the device used to measure earthquake.
  - seismograph
  - Hygrometer
  - Clinometers
  - Hydrometer
- Which energy is converted into electrical energy by a solar cell?
  - Chemical Energy
  - Solar Energy
  - Nuclear Energy
  - Magnetic Energy

6. Which of the following is not a renewable source of energy?
- (a) Solar energy (b) Biomass energy  
(c) Hydro energy (d) Tidal energy
7. Which of the following is not a green house gas?
- (a) Oxygen (b) Carbon dioxide  
(c) Chlorofluorocarbons (d) Methane
8. Ozone depletion in the atmosphere will cause
- (a) Forest fire (b) Increased incidence of skin cancer  
(c) Global warming (d) None of these
9. Population explosion has occurred in the last
- (a) 500 years (b) 300 years (c) 700 years (d) 150 years
10. The number of babies produced per thousand individuals is called
- (a) Natality (b) Mortality (c) Immigration (d) Emigration

PART - B (5 x 2 = 10 Marks)

11. Show the difference between food chain and food web with examples.
12. Suggest any two suitable methods to control the noise pollution.
13. What is the importance of green power?
14. Distinguish between sustainable and unsustainable development.
15. What do you mean by doubling time?

PART - C (5 x 16 = 80 Marks)

16. (a) (i) Describe the structure and functions of forest ecosystem. (8)  
(ii) What is the information that can be obtained from different types of ecological pyramids? (8)

Or

- (b) (i) Differentiate In-situ and Ex-situ conservation of biodiversity along with their merits and limitations. (8)  
(ii) Describe the structure and function of aquatic eco system. (8)

17. (a) (i) How is air pollutants classified? State the common air pollutants, their sources and effects on man and his environment. (8)
- (ii) Explain the cause, effects and control measures of water pollution. (8)

Or

- (b) (i) What is Tsunami? Enumerate its effect. What measures should be taken to mitigate their disaster. (8)
- (ii) Summarize the disposal of municipal solid waste management. (8)
18. (a) (i) With neat sketch, explain the function of nuclear reactor. (8)
- (ii) Discuss the function of wind mill. Mention the advantages and disadvantages of wind energy. (8)

Or

- (b) (i) Explain any three solar energy harvesting units that meet out the demand of energy. (8)
- (ii) Describe the Geothermal energy converting process. Mention the advantages and disadvantages of geothermal energy. (8)
19. (a) (i) Explain the concept of Rain water Harvesting with its advantages. (8)
- (ii) Elaborate the causes and effects of Global warming. (8)

Or

- (b) (i) Discuss the enforcement machinery involved in environmental legislation for the public awareness. (8)
- (ii) Give a detailed account of ozone layer depletion. (8)
20. (a) (i) Explain the major objectives of family welfare programmes in India. (8)
- (ii) Population explosion affects the environment seriously – Justify. (8)

Or

- (b) (i) Explain the symptoms, transmission, treatment and control measures of HIV/AIDS. (8)
- (ii) Discuss the role of information technology in the protection of environmental studies and human health. (8)

