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**Question Paper Code: 21005**

B.E. / B.Tech. DEGREE EXAMINATION, OCTOBER 2014.

Second Semester

Civil Engineering

01UCY204 - ENVIRONMENTAL SCIENCE

(Common to all branches)

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. Differentiate between renewable and non-renewable energy resources.
2. What are the causes of overgrazing?
3. Define photochemical smog.
4. What is disaster management?
5. What is genetic and species biodiversity?
6. What are the structural components of an ecosystem?
7. Define the term sustainable development.
8. What is wasteland reclamation? Give its benefits.
9. What is meant by Value Education?
10. What are the important objectives of family welfare programmes?

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Discuss how various sequence of ecological succession takes place with examples. (8)
- (ii) What are the threats to biodiversity? Explain them in detail. (8)

Or

- (b) (i) Discuss about the salient features of aquatic ecosystem. (8)  
(ii) Define hotspot. What are the hotspots of biodiversity? Discuss their salient features. (8)
12. (a) (i) Discuss the sources, adverse effects and control methods of soil pollution. (8)  
(ii) Discuss the source, effects and control measures of thermal pollution. (8)

Or

- (b) (i) Explain the major water pollutants and their effects. (8)  
(ii) How are solid wastes classified? Describe briefly the various methods of solid waste management and disposal. (8)
13. (a) (i) Discuss the traditional and modern agriculture and its effects on environment. (8)  
(ii) Explain in detail the role of an individual in conservation of natural resources. (8)

Or

- (b) (i) Discuss briefly the consequences of overdrawing and exploitation of ground water. (8)  
(ii) Explain the environmental impacts of mining. (8)
14. (a) (i) Write notes on (a) Nuclear Holocaust (b) Environmental ethics (8)  
(ii) What is watershed? Discuss the objectives and practices of watershed management. (8)

Or

- (b) (i) What are green house gases and green house effect? Discuss the potential and contribution of these gases to global warming. (8)  
(ii) Explain the mechanism of ozone layer depletion and its adverse effects on ecosystem. (8)
15. (a) (i) Explain the variation in population growth among various nations. (8)  
(ii) Explain briefly the mode of transmission of AIDS. How AIDS can be controlled? (8)

Or

- (b) (i) Deterioration of environment leads to deterioration of human health. Justify. (8)  
(ii) Write a brief note on Human Rights. (8)