A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 52007

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

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)

1. The primary producers in a forest ecosystem are CO1- R

   (a) Chlorophyll containing trees and plants (b) Herbivores

   (c) Carnivores (d) Bacteria

2. Genetic variation between distinct population of the same species is known as CO1- U

   (a) Species diversity (b) Ecosystem diversity (c) Genetic diversity (d) Food web

3. Which of the following is an air pollutant? CO2- U

   (a) Nitrogen (b) Carbon monoxide (c) Carbon dioxide (d) Oxygen

4. High level radioactive waste can be managed by CO2- U

   (a) Composting (b) Store indefinitely (c) Incineration (d) Neutralization

5. Fossil fuel based pattern of energy use is having the problem of CO3-R

   (a) limited natural reserve (b) Pollution

   (c) Lack of term sustainability (d) All the above

6. Identify the non-renewable source of energy from the following CO3- R

   (a) Solar (b) Wind (c) Tidal (d) Coal

7. The primary cause of acid rain around the world is CO4- R

(a) Carbon monoxide (b) Carbon dioxide (c) Sulphur dioxide (d) Oxygen

8. First of the major environmental act protection act to be promulgated in India was CO4- R

(a) The water act (b) The air act (c) The environment act (d) Noise pollution act

9. The average life expectancy around the world is currently CO5-R

(a) Decreasing (b) Increasing (c) Stabilizing (d) No Changing

10. Declaration of human rights by the United nation was established in CO5- R

(a) 1948 (b) 1950 (c) 1955 (d) 1946

PART – B (5 x 2= 10 Marks)

11. Define Food chain. CO1- R

12. List the sources of soil pollution. CO2- R

13. Identify the demerits of tidal energy. CO3-Ana

14. Define sustainable development. CO4- R

15. Define zero population growth. CO5- R

PART – C (5 x 16= 80 Marks)

16. (a) (i) Describe the structure and function of an grass land ecosystem. CO1- U (8)

(ii) Explain in situ and ex situ conservation methodology in conservation of Biodiversity. CO1- U (8)

Or

(b) (i) Discuss the process ecological succession. CO1- U (8)

(ii) Discuss the status of India as a mega diversity nation of biodiversity. CO1- U (8)

17. (a) (i) Discuss the various methods involved in disposal of municipal non hazardous solid wastes. CO2- U (8)

(ii) Discuss the role of individual in conservation of natural resources. CO2- U (8)

Or

	(b)	(i) Describe the sources and effects of water pollution.	CO2- U	(8)
		(ii) Discuss the effects and preventive measures of flood and landslides.	CO2- U	(8)
18.	(a)	(i) How is wind energy used to generate electricity? Give its merits and demerits.	CO3- U	(8)
		(ii) Discuss the major measures to attain sustainability.	CO3- U	(8)
		Or		
	(b)	(i) Discuss the term green power with an example	CO3- U	(8)
		(ii) Discuss different methods of harvesting of solar power.	CO3- U	(8)
19.	(a)	(i) Discuss the major issues related to resettlement and rehabilitation of the people.	CO4- U	(8)
		(ii) Discuss the effects and control measures of global warming.	CO4- U	(8)
		Or		
	(b)	(i) Describe any four waste land reclamation practices.	CO4- U	(8)
		(ii) Analyze the salient features and drawbacks of Wild life (protection) act 1972.	CO4- U	(8)
20.	(a)	(i) Discuss the role of IT on environment and human health.	CO5- U	(8)
		(ii) Write symptoms and control measures of HIV/AIDS .	CO5- U	(8)
		Or		
	(b)	(i) Explain the consequences of population explosion on environment.	CO5- U	(8)
		(ii) Discuss the objective and elements of value education.	CO5- U	(8)

52007