

A

Reg. No. :

--	--	--	--	--	--	--	--	--	--

Question Paper Code: 59175

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

Open elective

Computer Science and Engineering

15UCE975 - ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to ECE, EEE, EIE ,MECH,IT and Chemical Engineering branches)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. The organisms who need directly on producer is ----- CO1- R
(a) Autotrophs (b) Heterotrophs (c) Carnivores (d) Herbivores
2. The World Environment day is celebrated on CO1- R
(a) 6th June (b) 5th June (c) 6th July (d) 5th July
3. PH value of treated drinking water is between CO2- R
(a) 6.5 to 8.5 (b) Equal to 7 (c) less than 7 (d) 7 to 14
4. The average value of soil density is---- CO2- R
(a) 2.65 mg/l (b) 3mg/l (c) 2.5 mg/l (d) 3.5 mg/l
5. The size of dust particles is_____ CO3- R
(a) 0.5to 100 μm (b) 1to 150 μm (c) 1.5to 200 μm (d) 1to 200 μm
6. The solar energy that warms the Earth includes visible light, infrared and CO3- R
_____ coming from the sun.
(a) gamma rays (b) ultraviolet radiation (c) microwaves (d) sunspots
7. _____ is formed from incomplete combustion of organic matter. CO4- R
(a) Fumes (b) smoke (c) fog (d) mist

8. Renewable energy from biomass is called as_____ CO4- R
 (a) Biomass gasification (b) Clean technology
 (c) fuel cell technology (d) solar technology
9. The microbial film of the trickling filter is aerobic to a depth of CO5- R
 (a) 0.10 to 0.20 mm (b) 10 to 20 mm (c) 1 to 2 mm (d) 100 to 200 mm
10. The principle used for making payment to control the pollution is CO5-R
 (a) Beneficiary pays Principles (b) Precautionary principles
 (c) Principles 15 (d) Polluter- pays principles

PART – B (5 x 2= 10 Marks)

11. Define ecological succession and ecological pyramid. CO1- R
12. Define permeability of soil CO2-U
13. Name the techniques involved in processing of SWMS CO3- R
14. List out the some types of E-waste CO4- U
15. Define: Overview of the Constitutional provisions. CO5- Ana

PART – C (5 x 16= 80 Marks)

16. (a) Explain in detail about natural and man- made impacts on environment. CO1- U (16)
 Or
 (b) Explain in detail about Structure of the Atmosphere. CO1- U (16)
17. (a) Explain in detail about the physical and chemical properties of water. CO2-U (16)
 Or
 (b) Explain the different types of microorganism involved in biological treatment process. CO2-U (16)
18. (a) Explain in detail about air pollution due to industries and vehicles. CO3-U (16)
 Or
 (b) Explain in detail about Bio diversity. CO3-U (16)
19. (a) Explain in detail steps involved in environment management system. CO4- U (16)
 Or
 (b) Explain in detail about different types of clean technologies CO4- U (16)

20. (a) Explain in detail about the role of non government organizations and community participation in environmental management. CO5- U (16)
- Or
- (b) Explain briefly about implementation strategies, benefits and obstacles in Polluter Pays principles. CO5- U (16)

