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Question Paper Code: 59175

B.E./B.Tech. DEGREE EXAMINATION, DEC 2020

Open elective

Computer Science and Engineering

15UCE975 - ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to ECE, EEE, EIE ,MECH,IT ,Chemical ,BME, AGRICULTURE)

(Regulation 2015)

Duration: 1.15 hrs

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. The outer portion of Heterosphere is called as _____ CO1- R
(a) Thermosphere (b) Ionosphere (c) Tropopause (d) Lithosphere
2. Thickness of Stratosphere is CO1- R
(a) 1-18kms (b) 18-50kms (c) 50-85kms (d) 85-500kms
3. In safe drinking water the turbidity value is between _____ CO2- R
(a) 15 to 25NTU (b) 10 to 15 NTU (c) 10 to 25 NTU (d) 15 to 20 NTU
4. Permanent Hardness is caused due to the presence of _____ CO2- R
(a) Chlorides& Sulphides (b) Hydrogen ions (c) Organic matter (d) Acidity
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. In India the daily per capita generation of municipal solid waste in small towns is _____ CO3- R
(a) Paper (b) Paper and pulp (c) Pulp (d) Dust
7. Which series represent the environmental management standards? CO4- R
(a) ISO 9001 (b) ISO 50001 (c) ISO 14000 (d) ISO 40001
8. The BOD removal efficiency in Activated sludge process is about _____ CO4- R
(a) 70-80% (b) 60-98% (c) 85-90% (d) 60-80%
9. Which factors affecting efficiency of membrane CO5- R

- (a) Total dissolved (b) Viscosity (c) Density (d) Kinematic viscosity
10. Constitution empowers the parliament to make laws regarding CO5-R
- (a) Article 48-A (b) Article 51-A (c) Article 253 (d) Article 514

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain in detail about components of environment. CO1- U (8)
12. Explain in detail about dispersion of air pollutants with neat sketches. CO2-U (8)
13. Explain detail about hazardous waste management. CO3-U (8)
14. Explain in detail about different types of clean technologies. CO4- U (8)
15. Explain in detail about water act 1974 and air act 1981. CO5- U (8)