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Question Paper Code: 59175

B.E./B.Tech. DEGREE EXAMINATION, NOV 2018

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)

- Interlocking pattern of various food chains is called _____ CO1- R
(a) Food chain (b) Food web (c) Energy flow (d) Tropical levels
- The World Environment day is celebrated on CO1- R
(a) 6th June (b) 5th June (c) 6th July (d) 5th July
- 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
- PH value of soil is between CO2- R
(a) 2.2 to 9.6 (b) 6.5 to 8.5 (c) 6 to 6.5 (d) 2 to 7
- The size of dust particles is _____ CO3- R
(a) 0.5 to 100 μm (b) 1 to 150 μm (c) 1.5 to 200 μm (d) 1 to 200 μm
- Methyl mercaptain is mainly emitted from----- CO3- R
(a) Paper (b) Paper and pulp (c) Pulp (d) Dust
- _____ is formed from incomplete combustion of organic matter. CO4- R
(a) Fumes (b) smoke (c) fog (d) mist
- 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. 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. State food chain and food web. CO1- R
12. Define morality CO2-U
13. Define biodiversity CO3- R
14. Define Good housekeeping. CO4- U
15. Analyze the objectives of EIA. CO5- Ana

PART – C (5 x 16= 80 Marks)

16. (a) Define ecosystem .Explain its structural and functional components of ecosystem. CO1- U (16)
- Or
- (b) Explain in detail about components of environment. CO1- U (16)
17. (a) Explain about physical and chemical properties of soil. CO2-U (16)
- Or
- (b) Explain in detail about environment quality objectives and policies on new projects with their impacts. CO2-U (16)
18. (a) Explain about the sources, process and effects of municipal solid waste. CO3-U (16)
- Or
- (b) Explain in detail about Bio diversity. CO3-U (16)
19. (a) Explain in detail about waste treatment process Active Sludge Process and Trickling Filter. 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 in detail about environment impact assessment (EIA). CO5- U (16)

