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Question Paper Code: 49125

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

Elective

Civil Engineering

14UCE925- ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to all branches)

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Freshwater ecosystem covers ----- percentage of the earth's surface
(a) 0.5 (b) 0.6 (c) 0.7 (d) 0.8
2. What is another major factor for the loss of water
(a) Industrial wastage (b) Evaporation
(c) Human existence (d) Domestic wastage
3. At present National Ambient Air Quality standards exist for how much number criteria pollutants
(a) 8 (b) 11 (c) 6 (d) None of the above
4. When a source of pollution cannot be identified then it is named as -----
(a) Point source (b) Nonspecific source
(c) Nonpoint source (d) Unidentified source
5. What are major issues that contribute for global warming
(a) Green house (b) Earth quake
(c) Carbon mono-oxide (d) Burning of plastics

6. Which sector in U.S accounts for a significant factor for all forms pollutants except for sulfur oxides
 (a) Industrial sector (b) Medical sector (c) Transportation sector (d) All the above
7. ----- seeks to reduce negative impact of chemistry on the environment by preventing Pollution is as its source
 (a) Biochemistry (b) Green chemistry
 (c) Environmental chemistry (d) Analytical chemistry
8. Along which chemical makes a radionuclides much more dangerously radio active
 (a) Uranium (b) Plutonium (c) Phosphorus (d)None of these
9. Which are the two atmospheric layers show decrease in temperature with increase in altitude
 (a) Stratosphere and mesosphere (b) Mesosphere and thermosphere
 (c) Troposphere and mesosphere (d) All the above
10. Section ----- provides emission standards for automobiles
 (a) 18 (b) 19 (c) 20 (d) 16

PART - B (5 x 2 = 10 Marks)

11. List the functions of producers, consumers and decomposers in ecology
12. What is boiling point of water?
13. Point out few threats that cause biodiversity losses
14. Why nuclear hazards are so dangerous?
15. Define EIA?

PART - C (5 x 16 = 80 Marks)

16. (a) Classify and explain the different types of ecosystem with its components (16)
- Or
- (b) Explain in detail about the concept of sustainable development . (16)

17. (a) Explain in detail about chemistry ,physics and biology properties of water, air, land (16)

Or

(b) Explain the objectives of Environmental quality analysis and discuss some of the policies which improve Environmental Sustainability (16)

18. (a) (i) List the Country level issues on current environment ? (10)

(ii) Describe about global warming. (6)

Or

(b) Discuss in detail about the impacts of solid waste disposal (16)

19. (a) Principles of physics , chemistry and biology in engineering interventions such as waste treatment ? (16)

Or

(b) Classify the waste minimization techniques in detail? (16)

20. (a) Prepare a detailed report on role of NGO's in scaling up Environmental Management issues (16)

Or

(b) Explain about polluter –pays principle. (16)
