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 **Reg. No. :**

**Question Paper Code: 42004**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Second Semester

Civil Engineering

14UCY204 - 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. | Mushrooms and other fungi are responsible for breaking down dead organic matter. In the ecosystem, they are called | CO1- R |
|  | (a) Producers  | (b) Consumers  |
|  | (c) Developers  | (d) Scavengers |
| 2. | An example of carnivore is | CO1- R |
|  | (a) Tiger  | (b) Grass  | (c) Crow | (d) Deer |
| 3. | Itaiitai disease in Japan was caused by consumption of rice contaminated with |  CO2- R |
|  | (a) Mercury  | (b) Iron  | (c) Cadmium  | (d) Zinc |
| 4. | Unit of Noise is |  CO2- R |
|  | (a) Hendry  | (b) Joule | (c) Decibel  | (d) Celsius |
| 5. | Renewable energy resource is | CO3- R |
|  | (a) Solar | (b) Petroleum | (c) Coal  | (d) None of these |
| 6. | Blue baby syndrome is caused by the contamination of water due to \_\_\_\_\_\_\_\_ | CO3- R |
|  | (a) Phosphates | (b) Sulphur  | (c) Arsenic  | (d) Nitrates |
| 7. | The primary cause of acid rain around the world is | CO4- R |
|  | (a) Ozone  | (b) Carbon monoxide  | (c) Carbon dioxide | (d) Sulphur dioxide$ $ |
| 8. | Global warming is due to the presence of | CO4- R |
|  | (a) Oxygen | (b) Nitrogen  | (c) Halogen  | (d) Carbon dioxide |
| 9. | Every \_\_\_\_\_\_\_\_\_\_ person in this world is an Indian | CO5- R |
|  | (a) 6  | (b) 8 | (c) 12 | (d) 16 |
| 10. | The second largest population in the world is | CO5- R |
|  | (a) China | (b) India | (c) Germany | (d) Italy |
|  | PART – B (5 x 2= 10Marks) |
| 11. | Name the methods of detection of Ultrasonics. CO1- U |
| 12. | Classify solid wastes. CO2- U |
| 13. | What are the environmental effects of extracting and using mineral resources? CO3- U |
| 14. | What are the factors that influence climate change on the earth? CO4-U |
| 15. | What are the factors which do not influence transmission of HIV? CO5- U |
|  | PART – C (5 x 16= 80 Marks) |
| 16. | (a) | Explain: Forest ecosystem and Ecological succession.  | CO1- U |  (16) |
|  |  | Or |  |  |
|  | (b) | (i) Write short notes on Biogeographical classification of India  | CO1- U |  (8)  |
|  |  | (ii) Write a note on in-situ conservation of biodiversity.  | CO1- U |  (8) |
|  |  |  |  |   |
| 17. | (a) | Discuss the causes, effects and control of marine pollution. | CO2- U |  (16) |
|  |  | Or |  |  |
|  | (b) | (i) Describe the cause, effects and control measures of noise  pollution.  | CO2- U |  (8) |
|  |  | (ii) Write the cause, effects and preventive measures of  earthquake.  | CO2- U |  (8) |
|  |  |  |  |  |
| 18. | (a) | Explain in detail about role of an individual in conservation of natural resources. | CO-3 Ana |  (16) |
|  |  | Or |  |  |
|  | (b) | Discuss the role of an individual in the conservation of natural resources.  | CO3- Ana |  (16) |
|  |  |  |  |  |
| 19. | (a) | (i) Explain the roof top method of rain water harvesting and its  advantages. | CO4-U |  (8) |
|  |  | (ii) Write short notes on water shed management. | CO4-U |  (8) |
|  |  | Or |  |  |
|  | (b) | Write short notes on Forest Conservation Act.  | CO4- U |  (16) |
|  |  |  |  |  |
| 20. | (a) | Briefly discuss HIV/AIDS, mode of its spread and its effect on environment.  | CO5-App |  (16) |
|  |  | Or |  |  |
|  | (b) | (i) Explain the family welfare and family planning programme  in India.  | CO5-App |  (8) |
|  |  | (ii) Deterioration of Environment leads to deterioration of  human health. Justify.  | CO5-App |  (8) |