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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) |