Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14CH1003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ENVIRONMENTAL STUDIES** | **Max. marks :** | **100** |

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| **Q. No.** | **Questions** | | | | **Course outcome** | **Marks** |
| **PART-A (40X1=40 MULTIPLE CHOICE QUESTIONS)** | | | | | | |
| 1. | The Temples of modern India are ---------------- | | | | CO1 |  |
|  | a.Dams | b.Colleges | c. Factories | d.Agriculture |  | (1) |
| 2. | Environner means ---------------- | | | | CO1 |  |
|  | a. Surrounding | b.Neighbour | c. Living things | d. none of these |  | (1) |
| 3. | Which one of the following is not a consumer? | | | | CO1 |  |
|  | a.Omnivores | b.Detrivores | c. Carnivores | d. Herbivores |  | (1) |
| 4. | The percentage of freshwater on earth surface is ------------------- | | | | CO1 |  |
|  | a.3 | b. 97 | c. 5 | d.0.3 |  | (1) |
| 5. | The ‘creeping death of land’ refers to-------------- | | | | CO1 |  |
|  | a. Land degradation | b. Soil erosion | c. Desertification | d. Addition of synthetic fertilizer to soil |  | (1) |
| 6. | The soil erosion in steep slope can be controlled by ------------ | | | | CO1 |  |
|  | a. Contour bunding | b. Planting trees | c. Contour cultivation | d. Terracing |  | (1) |
| 7. | Lithosphere includes -------- | | | | CO1 |  |
|  | a. Water on the planet earth. | b. Gases surrounding the earth | c. Earth crust | d. Living species |  | (1) |
| 8. | The most endangered terrestrial eco-region which is rich in biodiversity is known as-- | | | | CO1 |  |
|  | a. Biosphere | b. Endemic region | c. Endangered region | d.Hotspots of biodiversity |  | (1) |
| 9. | National parks have only -----------zone | | | | CO1 |  |
|  | a. Buffer | b. Core | c.transition | d. forbidden |  | (1) |
| 10. | Example for endemic species------- | | | | CO1 |  |
|  | a. Cat | b. Rat | c. Cow | d.Kangaroo |  | (1) |
| 11. | Example for engineered ecosystem is--------------------- | | | | CO1 |  |
|  | a. Dams | b. Rivers | c. Forest | d. Desert |  | (1) |
| 12. | Which of the following is an example for genetic biodiversity | | | | CO1 |  |
|  | a. Cats and dogs | b. Mango and banana | c. Goat and sheep | d. Dalmatian and Pomeranian |  | (1) |
| 13. | Which one of the following is not a step in ecological succession? | | | | CO1 |  |
|  | a. Migration | b. Competition | c. Stabilization | d. None of the above |  | (1) |
| 14. | Production value of biodiversity deals with------------- | | | | CO1 |  |
|  | a. Future discovery | b. Products from biodiversity | c. Job opportunities | d. Medicinal products from living species |  | (1) |
| 15. | The species which are confined to a particular region is known as ---------- | | | | CO1 |  |
|  | a. Endemic species | b. Endangered species | c. Hotspot species | d. None of these |  | (1) |
| 16. | The number of hotspot(s) in india is/are------------------ | | | | CO1 |  |
|  | a.5 | b.2 | c.1 | d. 3 |  | (1) |
| 17. | The heavy metal that caused Minamata disease is----------------- | | | | CO2 |  |
|  | a. Zinc | b. Lead | c. Cadmium | d. Mercury |  | (1) |
| 18. | Thermal pollution can be controlled by ----------- | | | | CO2 |  |
|  | a. Cyclone separator | b. planting trees | c.cogeneration | d.Electrostatic precipitator |  | (1) |
| 19. | The reaction that takes place in nuclear reactor is--------------- | | | | CO2 |  |
|  | a. Controlled nuclear fission | b. Uncontrolled nuclear fission | c. Controlled nuclear fusion | d. Uncontrolled nuclear fusion |  | (1) |
| 20. | The largest wind mill of India is located in--------------- | | | | CO2 |  |
|  | a. Rajasthan | b. Kanyakumari | c. Bengaluru | d. Theni |  | (1) |

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| 21. | The noise intensity is measured in---------------- | | | | | CO2 |  |
|  | a. Decibel (dB) | b. Decibel (DB) | c. Decibel(db) | | d. Decibel (Db) |  | (1) |
| 22. | The age of organic materials can be identified using isotope of------------- | | | | | CO2 |  |
|  | a. Carbon | b. Sulphur | c. Nitrogen | | d. Hydrogen |  | (1) |
| 23. | Which one of the following is a secondary air pollutant? | | | | | CO2 |  |
|  | a. SO2 | b. NO | c. CO2 | | d. Acid rain |  | (1) |
| 24. | The organic waste in water is measured using--------------- | | | | | CO2 |  |
|  | a. Both BOD and COD | b. BOD | c.. COD | | d None of the these |  | (1) |
| 25. | Which of the following is not a concept in solid waste management? | | | | | CO2 |  |
|  | a. Restore | b. Reuse | c. Reduce | | d. Repair |  | (1) |
| 26. | Green chemistry deals with ------------------- | | | | | CO2 |  |
|  | a. Employing petrochemicals. | b. Using plant derived chemicals | c. Using green coloured chemicals | | d. Reduction or elimination of toxic chemicals |  | (1) |
| 27. | The gas that will not result in Green House Effect is--------------- | | | | | CO2 |  |
|  | a. Natural gas | b. CO2 | c. Water molecule | | d. Nitrogen |  | (1) |
| 28. | The main cause of ozone depletion is use of------------------ | | | | | CO2 |  |
|  | a.chlorofluoro carbons | b.oxygen | c. Water vapour | | d. Methane |  | (1) |
| 29. | The pH of unpolluted rain water is------------------ | | | | | CO2 |  |
|  | a.7.5 | b. 1.0 | c. 7.0 | | d. 5.7 |  | (1) |
| 30. | Which of the following is not a technique of rainwater harvesting? | | | | | CO2 |  |
|  | a.check dams | b.lagoons | c.dug wells | | d.biofiltration |  | (1) |
| 31. | The chemical that caused Bhopal disaster is-------------------- | | | | | CO2 |  |
|  | a. Methyl isocyanide | b.Menthyl isocyanate | c. Methyl isocyanate | d.Menthylisocyanide | |  | (1) |
| 32. | Environment act was enacted in the year--------------------- | | | | | CO2 |  |
|  | a. 1984 | b. 1982 | c. 1986 | | d. 1980 |  | (1) |
| 33. | The destruction of ozone layer involves------------------------ | | | | | CO2 |  |
|  | a . Free radical reaction | b. Electrophilic substitution | c. Nucleophilic substitution | | d. Electron transfer mechanism |  | (1) |
| 34. | Beneficial Ozone molecule is present in--------------------- | | | | | CO2 |  |
|  | a. Troposphere | b. Exosphere | c. Thermosphere | | d. Stratosphere |  | (1) |
| 35. | Population explosion is------------------ | | | | | CO2 |  |
|  | a. Sudden increase in population | b. Population that exceeds the supporting capacity of natural resources in particular region | c. More than one billion people | | d. Unexpected increase in population |  | (1) |
| 36. | The wrong statement among the following is-------------------- | | | | | CO2 |  |
|  | a. HIV infected people can lead a normal life | b. HIV is not transmitted through mosquitos | c. AIDS is curable disease | | d. HIV virus reduce the immunity system |  | (1) |
| 37. | The origin of HIV is------------ | | | | | CO2 |  |
|  | a. Europe | b. India | c. USA | | d. Africa |  | (1) |
| 38. | GPS stands for------ | | | | | CO2 |  |
|  | a. Geographical positioning system | b. Global Information and positioning system | c. Global positioning system | | d. Geographical positioning and information system |  | (1) |
| 39. | Which of the following is not a type of flood? | | | | | CO2 |  |
|  | a. Flash flood | b. Coastal flood | c. River flood | | d. Meteorological flood |  | (1) |
| 40. | The point at which earthquake originates is known as-------- | | | | | CO2 |  |
|  | a. Eye of the earthquake | b. Earthquake centre | c.Hypocentre | | d.Epicentre |  | (1) |

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| **PART B(8 X 5 = 40 MARKS) (ANSWER ANY EIGHT)** | | | |
| 41. | Describe the biotic components of an environment. | CO1 | (5) |
| 42. | How can we control the soil erosion in agricultural land with different slopes? | CO1 | (5) |
| 43. | Define the following a) endangered species b) Endemic species c) Hotspots of biodiversity | CO1 | (5) |
| 44. | What is food chain? Write its significances. | CO1 | (5) |
| 45. | List out thegaseous air pollutants. Write the sources of any two air pollutants. | CO2 | (5) |
| 46. | Discuss on the importance of 5R’s in solid waste management. | CO2 | (5) |
| 47. | Explain the decomposition of ozone molecule by CFC in the presence of UV radiation with mechanism. | CO2 | (5) |
| 48. | What are the duties and powers of central pollution control board? | CO2 | (5) |
| 49. | What are the measures taken by the government to uplift women in our society? | CO2 | (5) |
| 50. | What are the applications of GPS and GIS to protect our environment? | CO2 | (5) |
| **PART C( 2 X 10 = 20 MARKS) (ANSWER ANY TWO)** | | | |
| 51. | Renewable energy resource is the only solution to control air pollution. Discuss. | CO1 | (10) |
| 52. | Discuss the principles of green chemistry. | CO2 | (10) |
| 53. | Analyse the population growth in India. Predict the causes and suggest some method to control population growth | CO2 | (10) |

ALL THE BEST