Reg. No. : | | | | | | | | | | |

Question Paper Code: 51207

B.E. / B.Tech. DEGREE EXAMINATION, JUNE 2016

Second Semester

Civil Engineering

15UCY207 - ENVIRONMENTAL SCIENCE

(Common to ALL Branches)

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Interlocking pattern of various food chains in an ecosystem is called as

   (a) Food web (b) Herbivores
   (c) Seres (d) Food chain

2. Genetic variation between distinct populations of the same species is known as

   (a) Species diversity (b) Ecosystem diversity
   (c) Genetic diversity (d) Biodiversity

3. The unit of noise is measured in

   (a) *Cm* (b) *dB* (c) *ppm* (d) *nm*

4. Which of the following strategies should be given first preference as far as the management of plastic waste is concerned?

   (a) Recycle (b) Reuse
   (c) Reduce (d) All the above

5. Father of nuclear power development in India is

(a) Newton (b) Einstein
(c) Dr. H. Bhabha (d) Dr. A.P.J. Abdul kalam

6. Minimum speed required for satisfactory working of wind generator is _____ *km/hr*.

(a) 20 (b) 10 (c) 50 (d) 15

7. Ozone depletion is caused by

(a) Nitrous oxide (b) Carbon dioxide
(c) Chlorofluoro carbon (d) Methane

8. Which of the following gas is the most common and important in green house?

(a) CO_2 (b) O_2 (c) O_3 (d) CCl_4

9. Population explosion will cause

(a) Socio-economic problems (b) Food security
(c) Energy crisis (d) All the above

10. HIV passes from infected person to others by

(a) Saliva (b) Contaminated syringe
(c) Blood contact (d) All the above

PART - B (5 x 2 = 10 Marks)

11. Define endangered species.

12. Give examples for primary and secondary air pollutants.

13. What are fossil fuels?

14. Mention the causes and effects of acid rain.

15. What is population explosion?

PART - C (5 x 16 = 80 Marks)

16. (a) (i) Explain the role of producers, consumers and decomposers in an ecosystem. (8)

(ii) Explain the present day major threats to the biodiversity of India. (8)

Or

(b) (i) Briefly discuss the structure and function of forest eco system. (8)

(ii) Explain in-situ and ex-situ conservation of biodiversity along with their merits and limitations. (8)

17. (a) (i) Explain the causes, effects and control measure of water pollution. (8)

(ii) List the various ways in which an individual can contribute towards pollution prevention in the society. (8)

Or

(b) (i) Discuss the effects and control measures of thermal pollution? (8)

(ii) What do you understand by natural disasters? What measures you would take to prevent loss of lives from floods and earthquake? Explain. (8)

18. (a) (i) What are tidal energy? Explain the significance of it. (8)

(ii) Explain the importance and benefits of green power. (8)

Or

(b) (i) Describe the methods of harvesting solar energy. (8)

(ii) What is wind energy? Explain the advantages and disadvantages of wind energy. (8)

19. (a) Explain the phenomenon of green house effect. What factors are responsible for the global warming? Discuss the safety measures recommended to control the effect. (16)

Or

(b) (i) Discuss the causes and effects of the following:

(1) Acid rain

(2) Ozone depletion (8)

(ii) What is rainwater harvesting? What are the major objectives of rainwater harvesting? (8)

20. (a) (i) List out the salient features of the universal declaration of human rights. (8)

(ii) Discuss the modes of transmission, diagnosis and control of AIDS. (8)

Or

(b) (i) Explain the role of information technology in environment and human health. (10)

(ii) What is value education? Discuss the concept in details. (6)

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