

2017/ODD/12/32/SOT-103/383

B.Tech Odd Semester (CBCS) Exam., December—2017

**(Computer Science and Engineering / Agricultural
Engineering / Electronics and Telecommunication
Engineering)**

(1st Semester)

Course No. : SOTCF-03

(Environmental Science)

Full Marks : 50

Pass Marks : 15

Time : 2 hours

The figures in the margin indicate full marks for the questions

UNIT—I

(Marks : 15)

Put a Tick mark against the correct answer in the box
provided : 1×15=15

1. Hyperarid deserts receive precipitation less than

(a) 25 mm

(b) 250 mm

(c) 2500 mm–3000 mm

(d) 10 mm

2. Natural landscape consists of

- (a) forest
- (b) agricultural fields
- (c) football ground
- (d) None of the above

3. Which one of the following is a non-biodegradable pollutant?

- (a) Paper
- (b) Animal excreta
- (c) Wood
- (d) DDT

4. Four distinct seasons are found in which type of forest?

- (a) Tropical rain forest
- (b) Temperate deciduous forest
- (c) Mangrove forest
- (d) Boreal coniferous forest

5. Mangrove forest is found in

- (a) Sunderban Delta Region
- (b) Runn of Kutch
- (c) Coromandel Coast
- (d) None of the above

6. Rooftop water harvesting is practised in

- (a) Imphal
- (b) Shillong
- (c) Aizawl
- (d) Agartala

7. Which one of the following is a sedimentary cycle?

- (a) Carbon cycle
- (b) Hydrological cycle
- (c) Nitrogen cycle
- (d) Sulphur cycle

8. Ozone layer depletion is caused by

- (a) H_2SO_4 and SO_x
- (b) PAN and SPM
- (c) HNO_3 and NO_x
- (d) CO_2 and CFCs

9. Biotic environment includes

- (a) producers
- (b) consumers
- (c) decomposers
- (d) All of the above

10. The lowest layer of atmosphere is

- (a) stratosphere
- (b) mesosphere
- (c) troposphere
- (d) ionosphere

11. Xerarch denotes

- (a) succession begins with water
- (b) succession begins with rocks
- (c) succession begins with lichen
- (d) None of the above

12. Legumes are planted for increasing

- (a) nitrogen content in soil
- (b) phosphorus content in soil
- (c) sulphur content in soil
- (d) calcium content in soil

13. Exotic species are

- (a) native species
- (b) alien species
- (c) hybrid species
- (d) None of the above

14. The noise pollution is measured as

- (a) dobson
- (b) watt
- (c) decibel
- (d) kilometre per hour

15. The 'Kyoto Protocol on Climate Change' was signed in the year

- (a) 1995
- (b) 1996
- (c) 1997
- (d) 1998

UNIT—II

(Marks : 10)

16. Answer the following questions (any *five*) : $2 \times 5 = 10$

- (a) Explain the flow of energy in the ecosystem.

(b) Discuss the major causes of deforestation.

(c) Explain the term 'land-use-change'.

(d) Write a note on solid waste management.

(e) Name the biodiversity hot spots of India with endangered plants and animals.

(f) Define food chain and food web.

(g) Explain desert ecosystems and its types.

(h) Write a note on wind energy.

UNIT—III

(Marks : 15)

17. Write notes on any *five* of the following : 3×5=15

(a) Ecological pyramids

(b) Grassland ecosystems

(c) Renewable and non-renewable natural resources

(d) Air pollution and its sources

(e) Noise pollution and its standards (NCRR, 2000)

(f) Tropical cyclone

(g) Values of biodiversity with special reference to ethical value

(h) Dams—benefits and problems

UNIT—IV

(Marks : 10)

- 18.** What do you mean by forest? Mention the different types of forest ecosystems. Write a note on the direct and indirect benefits from forest resources. 5

Or

Define water pollution. Mention the highlights of the Water (Prevention and Control of Pollution) Act, 1974. 5

- 19.** Explain the term 'biodiversity hot spot'. Explain briefly the threats and conservation of biodiversity in local, national and global scale. 5

Or

Describe the processes involved for the management of solid waste. 5

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