18ESP21A

Exam Date & Time: 28-Sep-2020 (02:00 PM - 05:45 PM)

PSG COLLEGE OF ARTS AND SCIENCE

Note: Writing 3hrs: Checking & Inserting Image : 30mins

MSc DEGREE EXAMINATION MAY 2020
(Fourth Semester)

Branch - ENVIRONMENTAL SCIENCE

DISCIPLINE SPECIFIC ELECTIVE - II - NATURAL RESOURCES AND CONSERVATION
[18ESP21A]

Marks: 75

Duration: 210 mins.

SECTION - A

Answer all the questions.

1) In troposphere, air temperature decreases at the rate of _____ °C per km.
(i) 1.5
(ii) 6.5
(iii) 2.5
(iv) 10   (1)

2) Photovoltaic cell or solar cells converts _____.
(i) Thermal energy into electricity
(ii) Electromagnetic radiation directly into electricity
(iii) Solar radiation into thermal energy   (1)
(iv) Solar radiation into kinetic energy

3) The excess concentration of which of the following cause the teeth of children mottled and discoloured?
(i) Fluorides
(ii) Chlorides
(iii) Hardness   (1)
(iv) All of the above

4) Columbia river treaty was signed in the year _____.
(i) 1964
(ii) 1969
(iii) 1961   (1)
(iv) 1963

5) Soil conservation means
(i) Prevention of spread of desert
(ii) To check soil erosion by afforestation
(iii) To check soil erosion by wind and rains   (1)
(iv) All of these

6) Which of the following regions in India is included as hotspot?   (1)
(i) Eastern Himalayas and Western Ghats

(ii) Western Himalayas and Western Ghats
(iii) Northern Himalayas and Western Ghats
(iv) Southern Himalayas and Western Ghats

7)   Which type of resources have a never-ending process?
        (i) Renewable
        (ii) Non Renewable   (1)
        (iii) Perpetual
        (iv) Conventional

8)   Which of the following country generate all their electricity using renewable energy?
        (i) Iceland
        (ii) India   (1)
        (iii) USA
        (iv) Germany

9)   Globally, India is one of the _____ mega diversity countries.
        (i) 10
        (ii) 17   (1)
        (iii) 34
        (iv) 6

10)   Ex-situ conservation includes
        (i) Zoo
        (ii) Botanic garden   (1)
        (iii) Germplasm bank
        (iv) All of the above

SECTION - B

Answer all the questions.

11)   Summarize the various sources of air pollution .

                                                                                    (5)

a)
[OR]   Energy efficiency of direct and indirect solar energy.   (5)
b)

12)   "Water is a fragile resource" - Justify.

                                                                                    (5)

a)
[OR]   Discuss the salient features of Columbia River Treaty.   (5)
b)

13)   Summarize the basic ecological functions of forest ecosystem.

                                                                                    (5)

a)
[OR]   Write a short notes on "Biodiversity hotspots in India"?   (5)
b)

14)   Discuss the environmental impacts of mineral mining.   (5)

a)

[OR]
b)   Analyze and summarize the mineral resources that can be harvested from sea.

(5)

15)   Differentiate between national parks and sanctuaries.

(5)

a)

[OR]
b)   What is red data book and outline its uses?

(5)

SECTION - C

Answer all the questions.

16)   Illustrate the components of atmosphere with a mention on it's chemistry.

(8)

a)

[OR]
b)   Summarise various renewable energy resources.

(8)

17)   Status of India's water availability and conservation .

(8)

a)

[OR]
b)   Describe the Columbia River water management system and explain is it possible in India?

(8)

18)   Ecotourism is the biggest treat to wilderness? Justify.

(8)

a)

[OR]
b)   Why India must protect the Western Ghats? List out conservation measures.

(8)

19)   Explain the consequences of non-renewable energy resources utilization.

(8)

a)

[OR]
b)   How to stop over exploitation of non-renewable energy resources?

(8)

20)   Enumerate the human contributions to species extinction.

(8)

a)

[OR]
b)   Illustrate various conservation methods available to protect wildlife population.

(8)

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