

S-2/EVSG/02/19

TDP (General) 2nd Semester Exam., 2019

## ENVIRONMENTAL SCIENCE

(General)

[DSC/GE]

### SECOND PAPER

Full Marks : 60

Time : 3 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

1. Answer any six questions :  $2 \times 6 = 12$

(a) What are endangered species?

(b) What do you mean by megadiversity country?

(c) What is key stone species?

(d) What are the different horizons of a soil profile?

(e) Write note on UV-B radiation.

(f) What is cyclone?

[ Turn Over ]

( 2 )

(g) What do you mean by carbon credit?

(h) What is green house effect?

2. (a) What is ex-situ biodiversity conservation? Briefly describe different types of ex-situ biodiversity conservation. What are the major phytographic and zoogeographic zones of India?

2+5+5=12

Or

(b) Write notes on the following :

4×3 = 12

(i) Convention on biological diversity.

(ii) Role of traditional knowledge in conserving biological diversity.

(iii) Man and biosphere programme.

3. (a) What are the major effects of acid rain on the environment? Explain the formation of acid rain with chemical reaction. What are the conditions that lead to the formation of photochemical smog in the atmosphere?

4+5+3=12

Or

( 3 )

- (b) What is nitrogen cycle? Explain using chemical reaction how bacteria are involved with the nitrogen cycle? What is fermentation? What is the significance of temperature in fermentation process? Name some categories of chemical routinely produced by fermentation?

2+4+2+2+2=12

4. (a) What do you mean by secondary air pollutants? Write the process of formation of two secondary air pollutants. What are the environmental implications of secondary air pollutants?

3+5+4=12

Or

(b) Write notes on the following :

4×3=12

(i) Asian brown cloud.

(ii) Ozone depleting substances (ODS)

(iii) Green house gases (GHG's)

5. (a) Write the function of IPCC. What do you mean by clean development mechanism? Mention some strategies for mitigation of global warming.

4+4+4=12

Or

[ Turn Over ]

( 4 )

(b) Write note on the India's vulnerability to climate change. Discuss India's climate change action plan. Mention some steps taken by India for climate adaptation.

4+4+4=12