

Environmental Science

2022

Time : 3 hours

Full Marks : 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from **all** the Parts as directed.

Part – A

(Objective Type Questions)

1. [A] Choose the correct answer of the following :

1×5 = 5

(a) Eutrophication in lakes is due to the presence of :

- (i) Nitrogen
- (ii) Phosphorus
- (iii) Oxygen
- ☒ (iv) Both (i) and (ii)

(b) Which two gases are associated with acid rain ?

☒ (i) SO_2 and NO_2

(ii) NO_2 and O_2

(iii) CO_2 and SO_2

(iv) CO_2 and NO_2

(c) Major functional components of any ecosystem is :

(i) Nutrient cycling

☒ (ii) Energy flow

☒ (iii) Both (i) and (ii)

(iv) None of these

(d) Which of the following is non-renewable source of energy ?

(i) Wind energy

(ii) Solar energy

(iii) Tidal energy

☒ (iv) Natural gas

(e) Sustainable Development is the main objective of :

(i) Rio Summit

(ii) Kyoto Protocol

✓ (iii) Earth Summit

(iv) Both (i) and (iii)

1. [B] Fill in the blanks :

1×5 = 5

(a) The first trophic level in an ecosystem is

Producers.

(b) Nuclear energy is non-renewable source of energy.

(c) The most important reason for biodiversity loss is habitat loss & fragmentation.

(d) The cause of 'Blue Baby Syndrome' is water contaminated with nitrate.

(e) The water sharing dispute between Karnataka and Andhra Pradesh is over waters of river Krishna.

Part – B

(Short-answer Type Questions)

2. Write short notes on any **four** of the following in not more than **200** words each : $5 \times 4 = 20$

✓ (a) Concept of Sustainable Development

(b) Estuarine ecosystem

✓ (c) Montreal Protocol

- (d) Ecological services of biodiversity
- ✓(e) Smog
- ✓(f) Biodiversity hot spots of India

Part – C
(Long-answer Type Questions)

4. Answer any **four** questions of the following :

$10 \times 4 = 40$

- (a) With the help of diagrams, describe succession in a desert ecosystem.
- ✓(b) Suggest measures to minimise noise pollution on Ashok Rajpath, Patna.
- ✓(c) Define Air Pollution. What are the major effects of air pollution ?
- ✓(d) What do you mean by soil erosion ? How can it be prevented ?
- ✓(e) Define endangered species. Give examples of some endangered plants and animal species.
- (f) Describe the salient features of National Environmental Policy.

