

2020

Time : 3 hours

Full Marks : 60

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

The figures in the margin indicate full marks.

Answer any **four** questions in which

Q. No.1 is compulsory.

1. Choose the correct answer of the following :

1×15 = 15

(a) Soil formation begins by the process of breaking down of parent rock, known as :

- (i) Weathering
- (ii) Deposition
- (iii) Erosion
- (iv) None of these

(b) A measure of the amount of water vapour in the air is called :

- (i) Evaporation
- (ii) Precipitation
- (iii) Condensation
- (iv) Humidity

(c) Where does the energy to derive the Hydrological cycle come from :

- (i) Earth's interior
- (ii) The Sun
- (iii) Plate tectonics
- (iv) Photosynthesis

(d) Reed swamp stage is seen in :

- (i) Xerosere
- (ii) Plasmosere
- (iii) Hydrosere
- (iv) Lithosere

(e) The region of Earth, where life exists is called :

- (i) Atmosphere

- (ii) Biosphere
 - (iii) Lithosphere
 - (iv) Hydrosphere
- (f) Each stage in food chain is called a :
- (i) Photon level
 - (ii) Energy level
 - (iii) Trophic level
 - (iv) Phantom level
- (g) Overlapping food chains in an ecosystem forms :
- (i) Food chain
 - (ii) Food web
 - (iii) Niche
 - (iv) Symbiosis
- (h) What percentage of energy is passed on to each trophic level in an ecosystem ?
- (i) 10%
 - (ii) 50%

- (iii) 90%
 - (iv) 100%
- (f) Acid rain is caused by the emission of :
- (i) Sulphur dioxide
 - (ii) Nitrogen oxide
 - (iii) Carbon dioxide
 - (iv) Both (i) and (ii)
- (j) Which of the following is not a green house gas ?
- (i) Methane
 - (ii) Hydrogen
 - (iii) Nitrous oxide
 - (iv) Ozone
- (k) Global warming is also known as :
- (i) Climate change
 - (ii) Ecological change
 - (iii) Atmosphere change
 - (iv) None of these

- (l) What is the total percentage of nitrogen gas in the air ?
- (i) 12%
 - (ii) 21%
 - ✓(iii) 78%
 - (iv) 87%
- (m) Which of the following is the most polluted river ?
- ✓(i) Ganga
 - (ii) Chenab
 - (iii) Ravi
 - (iv) Kaveri
- (n) Which of the following is the primary cause of water pollution ?
- (i) Plants
 - (ii) Animals
 - ✓(iii) Human activities
 - (iv) None of these

- (o) The pollutant responsible for Ozone hole is :

- ✓(i) CO_2
- (ii) SO_2
- (iii) CO
- (iv) CFC

2. Write short notes on any **three** of the following :

5×3 = 15

- (a) Hydroponics
- (b) Food chain
- (c) Types of Precipitation
- (d) Effects of Air Pollution
- ✓(e) Food web

3. Write short notes on any **three** of the following :

5×3 = 15

- (a) Hydrosere
- (b) Components of Ecosystem
- (c) Global warming

- (d) Soil Profile
- (e) Green House Effect
4. Describe the structure and functions of a pond Ecosystem. 15
5. Discuss Hydrological cycle. 15
6. Define succession and discuss Xerosere. 15
7. Describe the causes, effect and control of water pollution. 15
8. What is soil ? Describe its formation, composition and components. 15

