4 SEM TDC BOTH (CBCS) C 9

2022

(June/July)

BOTANY

(Core)

Paper: C-9

(Plant Ecology and Phytogeography)

Full Marks: 53
Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

- 1. Choose the correct answer from the following alternatives: 1×5=5
 - (a) Transition zone between two vegetations is known as
 - (i) ecotone
 - (ii) ecotype
 - (iii) ecosystem
 - (iv) ecocline

- (b) Last stabilized community in plant succession is called
 - (i) pioneer community
 - (ii) climax community
 - (iii) seral community
 - (iv) ecosere
- The water held tightly in a thin film by the soil particles is known as
 - (i) capillary water
 - (ii) runaway water
 - (iii) hygroscopic water
 - (iv) gravitational water
- (d) Reduced leaves and sunken stomata are the characteristic feature of
 - (i) epiphytes
 - (ii) hydrophytes
 - (iii) mesophytes
 - (iv) xerophytes
- If the stronger partner is benefited and the weak partner is damaged it is known
 - (i) amensalism
 - (ii) symbiosis
 - (iii) predation
 - (iv) allotropy

2. Write short notes on any three of the $4 \times 3 = 12$ following:

- (a) Homeostasis
- (b) Ecological importance of water
- (c) Commensalism
- (d) Edge effect
- (e) Continental drift
- 3. Define plant succession. Describe the causes and types of plant succession. 2+4+6=12

Or

Write explanatory notes on the following:

 $6 \times 2 = 12$

- (a) Hydrological cycle
- (b) Ecological speciation
- 4. Define ecosystem. Write about the structure and function of an ecosystem. Mention precisely the effect of human activity on 1+3+5+3=12 forest ecosystem.

Or

What is biogeochemical cycle? Describe the nitrogen cycle with appropriate sketches. Write the importance of nitrogen cycle. 1+6+3+2=12

(Turn Over)

5. What are the objectives of phytogeography?

Describe the phytogeographical region of India.

4+8=12

Or

Write notes on the following:

6×2=12

- (a) Endemism
- (b) Factors affecting distribution of species

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