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4 SEM TDC BOTH (CBCS) C 9

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(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
- (c) 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
- (e) If the stronger partner is benefited and the weak partner is damaged it is known as
- (i) amensalism
 - (ii) symbiosis
 - (iii) predation
 - (iv) allotropy

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

- (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 forest ecosystem. $1+3+5+3=12$

Or

What is biogeochemical cycle? Describe the nitrogen cycle with appropriate sketches. Write the importance of nitrogen cycle.

$1+6+3+2=12$

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
