

Total No. of Printed Pages—3

4 SEM TDC BOTH (CBCS) C 9

2 0 2 6

(May/June)

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. (a) Choose the correct answer of the following : 1×3=3
- (i) The first level of ecological organization is biome / individual / population.
- (ii) Grazing food chain starts with plant / microbes / soil.
- (iii) Energy pyramid is always downward / upright / large at middle.

(2)

(b) Fill in the blanks : $1 \times 2 = 2$

(i) Lichen is an example of ____ relationship.

(ii) ____ is the example of sedimentary biogeochemical cycle.

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

(a) Homeostasis

(b) Soil profile

(c) Parasitism

(d) Water in soil

(e) Light as an ecological factor

3. Define succession. What are the different types of succession? Explain the climax concept in the process of succession.

$2+5+5=12$

Or

Write explanatory notes on the following :

$6 \times 2 = 12$

(a) Natality and mortality

(b) Nitrogen cycle

4. Define ecosystem. Explain two different models of energy flow in ecosystem. $2+10=12$

(3)

Or

Write notes on the following : $4 \times 3 = 12$

(a) Gross primary productivity and net primary productivity

(b) Ecotone and edge effect

(c) Ecological speciation

5. What are the different principles of phytogeography? 12

Or

Write explanatory notes on the following : $6 \times 2 = 12$

(a) Theory of continental drift

(b) Tropical biome
