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4 SEM TDC BOTH (CBCS) C 9

2024

(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 necessity of an ecosystem is water/oxygen/energy/nitrogen.

(ii) For recycling of matter which one is important?

(Producers/Decomposers/
Consumers/All of these)

(2)

(iii) A basic constituent of all organic compounds and a major element involved in energy fixation is nitrogen/carbon/oxygen/sulphur.

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

(i) The first organisms to become established in an ecosystem undergoing succession are known as _____.

(ii) The stable community that ends the succession is termed the _____.

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

(a) Scope of ecology

(b) Light as an ecological factor

(c) Ecotone and edge effect

(d) Commensalism

(e) Physical properties of soil

3. Define population. What are the different attributes of population? Write in brief the population interactions with suitable example. $2+4+6=12$

(3)

Or

Write explanatory notes on the following :

$6+6=12$

(a) Synthetic characters of community

(b) Ecological pyramid of number

4. Define ecosystem. Describe the structure of an ecosystem by taking any example you have studied. $2+10=12$

Or

Write notes on the following :

$4 \times 3 = 12$

(a) Productivity

(b) Grazing food chain

(c) Nitrogen cycle

5. Discuss the principles of phytogeography. Differentiate static phytogeography from dynamic phytogeography. $10+2=12$

Or

Write notes on the following :

$6+6=12$

(a) Types of endemics

(b) Floristic regions of Assam
