FYUG/Sem-2/BT-CE1

2026
(Regular)
Botany (Core)
Paper Code : BT-CE-2114
Paper Name : Plant Ecology & Taxonomy

Time : 2 hours *Full Marks : 45*

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×4=4

a) Which scientist is credited with Shelford's law of tolerance ?

i) James Shelford

ii) Jacob Shelford

iii) Ernest Shelford

iv) None

b) The Pyramid of numbers in a parasitic food chain is :

i) Upright Pyramid

ii) Straight Pyramid

iii) Inverted Pyramid

iv) Spindle shaped Pyramid

c) Define Ecotone.

d) What is effective publication ?

2. Answer the following questions briefly : 2×3=6

a) What is Detritus food chain ?

b) Distinguish between the energy flow and nutrient cycling.

Contd.

c) What is labellum and rostellum of the family Orchidaceae ?

3. Answer ***any three*** of the following questions : 5×3=15

a) Descrive the adaptation of Hydrophytic plants.

b) Describe the Ecological Pyramids of an ecosystem.

c) Describe the role of Pollen characters in Taxanomy.

d) Briefly describe the different biogeographical zones of India.

e) Give a brief account of the significance of Multiaccess Keys in identification of plants.

f) Draw and describe the floral character of the Lamiaceae family with floral diagram.

4. Answer ***any two*** of the following : 10×2=20

a) What is Plant Succession ? Describe various types of succession in a plant community. Briefly write the process of plant succession in a xeric condition.

b) What is biogeochemical cycle ? Describe the Carbon cycle.

c) What is Endemism ? Describe the factors responsible for Endemism.

d) What are Herbaria ? Describe elaborately their functions. Name two famous Herbaria of the world.

■■■