SH-III/NR/2107/19

B.Sc. 3rd Semester (Honours) Examination, 2019-20

FORESTRY

Course ID : NR2107   **Course Code : SH-NR-2107**

Course Title : Forest Ecology and Biodiversity

Time: 2 Hours   **Full Marks: 50**

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Write a definition or short answer of *any ten* of the following: 1×10=10

(a) Population ecology.

(b) Pyramid of energy in pond ecosystem is always _____ (Inverted/Upright) only.

(c) Climax

(d) Gross productivity

(e) Niche

(f) Food chain

(g) Crude density

(h) Abundance

(i) Frequency

(j) Basal area

(k) Specific density

(l) Abundance

(m) Biotic components of desert ecosystem

(n) Decomposer

(o) What is succession?

2. Write short note/define *any ten* of the following: 2×10=20

(a) Differentiate between primary and secondary succession.

(b) Define Autotrophic and heterotrophic component.

(c) Define age pyramid which is responsible for stable population.

(d) Differentiate between biotic and abiotic components.

(e) Define autotrophic and heterotrophic succession?

(f) Define pyramid of number with diagrams.

(g) Kinds of ecosystems

   (h) Write short note on Food web.

    (i)   Define commensalism with example.

   (j) Negative interaction

   (k) Causes of succession.

    (l) Ecological equivalents

  (m) Population dynamics

   (n) Types of dispersion

   (o) Stabilization

3. Write down in brief *any four* of the following: 5×4=20

   (a) Explain *Ex-situ* and *In-situ* methods of conservation.

   (b) List the characteristics of a population. Explain with diagrams any one characteristic.

   (c) Define succession. Give an account of general process of succession in nature.

   (d) What is pond ecosystem? Explain the pond ecosystem with diagram.

   (e) Explain the three hypothetical age pyramids type with diagrams.

   (f) Explain population dynamics and carrying capacity.

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