



Ba/Bs/EVS/C-5T

2024

(FYUGP)

(3rd Semester)

ENVIRONMENTAL SCIENCE

(Major)

Paper Code : EVS/C-5T

(Ecology and Ecosystem)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Discuss Shelford's law of tolerance. Write a note on Eltonian niche and Hutchinsonian niche. 5+10=15

Or

Define thermoregulation. What are the strategies of adaptation in plants and animals? 3+6+6=15

2. Explain in detail the characteristics of population. 15

Or

What are the various types of population growth? Explain the factors that limits population growth. 7+8=15

3. What is keystone species? Elaborate on the various species interaction in an ecosystem. 3+12=15

Or

Define ecological succession. What are primary and secondary successions? Write a note on climax community concepts. 2+6+7=15

4. What are ecosystem boundary and ecosystem metabolism? Describe the detritus pathway of energy flow and decomposition processes. 5+10=15

Or

Write a note on secondary production and trophic efficiency. 7+8=15

5. Explain nutrient cycle models. Write nutrient supply and uptake. 7+8=15

Or

Discuss the role of polyploidy and genome size in determining invasiveness. 7+8=15

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