

ENVIRONMENTAL SCIENCES

**PAPER -II
ECOLOGICAL ORGANISATION**

Duration : 3 Hrs.

M.M.: 50

UNIT-I

Population ecology : Definition, natality, mortality, fecundity, age and sex ratio; population growth form and concept of carrying capacity, population regulation.

UNIT-II

Community ecology - The biotic community concept; community characteristics- analytical characteristics of the community - quantitative, qualitative characteristics, synthetic characteristics of community, IVI and concept of ecological dominance.

UNIT-III

Methods of studying vegetation, gradient analysis and continuum concept, concept of ecotone and edge effect. Species diversity and diversity indices; community classification; Ecological niche.

UNIT- IV

Interspecific interactions - Commensalism, Amensalism, Mutualism, Protocooperation, Symbiosis, Predation, Parasitism, Competetion, Epiphytism, Types

of association-Colonization, Aggregation, Social organization and behaviour.

UNIT-V

Ecological succession; Types, cause and processes of succession, hydrosere, xerosere, significance of ecological succession; concept of climax.