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7216

Roll No

M. Sc. / II

ENVIRONMENTAL BIOLOGY- Paper VI
(Community Ecology, Ecosystem Dynamics and Modelling)

Time 3 hours

Maximum Marks 45

(Write your Roll No on the top immediately on receipt of this question paper)
Attempt all questions

1. Attempt any five

- (i) Discuss Clement's and Gleason's view of describing plant communities
- (ii) Discuss the various hypotheses that have been put forward to explain succession
- (iii) Mention different methods used to estimate the primary productivity in aquatic ecosystems
- (iv) What are drought tolerant and drought resistant plants Describe some of the adaptations shown by these plants
- (v) Briefly describe Raunkiaer's life forms
- (vi) Discuss Enemy Release Hypothesis
- (vii) Discuss the biochemical basis of plant competition

5 x 5

2. Attempt any five

- (i) Discuss the causes and consequences of human alteration of nitrogen cycle
- (ii) Discuss 'Evolution of Increased Competitive Ability' and Novel Weapons Hypothesis' in relation to invasion success of an exotic plant
- (iii) Describe detritus food chain by taking an example
- (iv) Discuss Grime's CSR triangle in context of primary plant strategies.
- (v) Explain Leibig law of minimum and Shelford law of tolerance
- (vi) Resource-ratio hypothesis of plant competition and its alternate view
- (vii) Homeostasis of the ecosystem

5 x 4