



JAY-003-1143002

Seat No. _____

**M. Sc. (Botany) (Sem. III) (CBCS) (W.E.F. 2016)
Examination**

December - 2019

BOT - 314 : Plant Ecology

Faculty Code : 003

Subject Code : 1143002

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following : (Any Seven) 7×2=14

- (a) What is Importance Value Index (IVI) ? Write step for polygraph construction.
- (b) What is phenology? Write its importance.
- (c) Write the role of organic matter in ecosystem.
- (d) Define ammonification and denitrification.
- (e) How do dead organisms contribute to energy flow?
- (f) Write the environmental factor that affecting productivity.
- (g) What is population? Name different parameters used in population study.
- (h) What is density and frequency?
- (i) Give any four causes responsible for accidental fires.
- (j) What is sociability? Give its classification.

2 Answer the following : (Any Two) 2×7=14

- (a) Briefly describe the different types of growth forms.
- (b) Describe quantitative character of community.
- (c) Write a short note on stratification.

3 Answer the following : **2×7=14**

- (a) Describe the causes, trends and types of succession.
- (b) Write short note on plant litter and decomposition.

OR

3 Answer the following : **2×7=14**

- (a) What is productivity? Describe the method of productivity measurement.
- (b) Briefly describe the energy flow work in an ecosystem.

4 Answer the following : **2×7=14**

- (a) Give an account on classification and importance of ecotype.
- (b) Describe plant indicator.

5 Write short note on any **two** of the following : **2×7=14**

- (a) Ecological niche
 - (b) Forest fire
 - (c) Soil aggregates
 - (d) Desertification
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