



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Sc (Hons.) Forestry 2017 Admission**  
**III Semester Final Examination-January 2019**

Narm.2103

Forest Ecology (1+1)

**Marks: 50**  
**Time: 2 hours**

**I Fill in the blanks:** **(10x1=10)**

- 1 A group of individuals of a plant/animal species inhabiting in an area called \_\_\_\_\_
- 2 Species restricted to specific region is called \_\_\_\_\_
- 3 The ecological pyramid concept was first proposed by \_\_\_\_\_
- 4 In grassland ecosystem, the pyramid of biomass is \_\_\_\_\_

**State True or False**

- 5 The species diversity decreases when succession as proceeds
- 6 The food chain become more complex in a climax ecosystem

**Match the Following**

- |                  |                     |
|------------------|---------------------|
| 7 Altitude       | a Green house gas   |
| 8 Grassland      | b Species diversity |
| 9 Carbon dioxide | c msl               |
| 10 Shannon index | d Herbivore         |

**II Write Short notes on ANY FIVE of the following** **(5x2=10)**

- 1 Different levels of biodiversity.
- 2 Carrying capacity.
- 3 Differentiate between Autecology and Synecology
- 4 Ecological succession
- 5 Differentiate between *In situ* and *Ex situ* conservation
- 6 Species
- 7 IUCN

**III Answer ANY FIVE of the following** **(5x4=20)**

- 1 Raunkiers system of classification.
- 2 How importance value index is calculated for a given plant community?
- 3 Four major forest types in Kerala.
- 4 Abiotic factors in an ecosystem.
- 5 Trophic levels with suitable examples.
- 6 Hierarchy in a forest ecosystem.
- 7 Biogeochemical cycle.

**IV Answer ANY ONE of the following** **(1x10=10)**

- 1 Carbon cycle in forest ecosystem and its role in climate change scenario
- 2 Champion and Seth Classification

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