

Date - 19.02.2025

Department of Botany - B.Sc part-II Hons

E. Copy.

online class. T.T. College, Ara, Dr Sunil Pandey.

Time - 10:00 - 11:00

Question → Give an account of grassland ecosystem? Group - B. paper - II - Ecology -

Ans → Grassland is a terrestrial type of ecosystem which occupies roughly 19% of the total land area of the earth's surface. The various components of this ecosystem are mentioned below:-

1. Abiotic Components → The abiotic components are the chemical elements like C, H, O, N, P, S, etc. These are the nutrients and supplied by CO_2 , H_2O , NO_3 , PO_4 , SO_4 etc. present in the soil and air, in addition to these some trace elements are also helpful which are present in the soil.

2. Biotic Components: - It comprises components in the form of producers, consumers and decomposers.:-

A. Producers - The producers are chiefly grasses, such as *Dichanthium*, *Cynodone*, *Desmodium*, *Digitaria*, *Setaria*, *Brachiaria*, *Sporobolus* etc. with some forbs and shrubs.

B. Consumers: - The consumers are of two groups:-

Primary Consumers → The primary consumers are the herbivores, such as cows, buffaloes, deer, sheep, rabbits, goats, mice etc. which graze grass.

Secondary Consumers → The carnivores are the secondary consumers which feed directly on herbivores, foxes, jackals, snake, frogs, lizards, birds. Come to this group.

C. Decomposers → Bacteria and fungi are the decomposers which bring about the minerals back to the soil.

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