**STUDY MATERIAL**

**Semester – IV (GENERAL) PAPER IV, unit – 3**

 **TYPES OF SUCCESSION**

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* **BASED ON NATURE OF BARE AREA :-**

Depending on the nature of bare area on which it developed, the succession may be of two types, which are as follows –

1. PRIMARY SUCCESSION :-

 The succession that start on extreme bare area on which there was no previous existence of vegetation is called primary succession or presere.

In primary succession, the area is colonized by organisms for the first time.

1. SECONDARY SUCCESSION :-

 The succession that start on secondary bare area on which once occupied by original vegetation but later on become completely cleaned of vegetation by the process called denudation is called secondary succession. The sudden change in climatic factors, biotic intervention, fire etc causes the existing community to disappear. The bare or naked area is known as denudated area or naked area.

* **BASED ON PREDOMINANCE OF GREEN PLANTS OF HETEROTROPHIC ORGANISMS** :-
1. AUTOTROPHIC SUCCESSION :-

 In this succession, initially the green plants are much greater in quantity than animals and this take place in medium reach inorganic substances. Energy flow is maintained indefinitely. There is gradual increase in organic matter content supported by energy flow.

1. HETEROTROPHIC SUCCESSION :-

 In this succession, the population like heterotrophic organisms like bacteria, fungi and animals are in greater quantity at the initial stage and such succession begin in a medium reach in organic matter, and there is a progressive decline in the energy content.

* **BASED ON THE TYPE OF MODIFICATION OF THE ENVIRONMENT BY THE COMMUNITIES THEMSELVES :-**
1. AUTOGENIC SUCCESSION :-

 After the succession has begun the community itself modifies its own environment by new communities. This course of succession is known as autogenic succession.

1. ALLOGENIC SUCCESSION :-

 In this succession, replacement of one community by another is largely due to forces other than the effects of communities in the environment.

* **BASED ON THE NATURE OF INITIATING ENVIRONMENT :-**
1. HYDROSERE OR HYDRARCH :-

 Succession starting in the region where water is in plenty as pond, lakes, streams, swamp, bog etc.

1. MESOSERE OR MESARCH **:-**

 Succession starting in the area where adequate moisture conditions are present**.**

1. XEROSERE OR XERARCH **:-**

 Succession starting in the area where moisture is present in a minimum amounts, such as dry deserts, rocks etc

1. LITHOSERE :-

 Succession when initiating on rocks.

1. PSAMMOSERE :-

 Succession when initiating on sand.