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⑥ Heterotrophic succession: It is characterised by early dominance of heterotrophic organisms, such as bacteria, actinomycetes, fungi and animals. It begins in medium which is rich in organic matter such as small area of river stream.

⑦ Induced succession: Activity such as overgrazing, frequent scraping, cultivation or industrial pollution may cause deterioration of ecosystem. Agricultural practices are retrogression of a stable state to a young state by man's deliberate action.

⑧ Retrogressive succession: It means a return to simpler and less dense form of community from a climax or advanced community.

⑨ Cyclic succession: It is local occurrence, within a large community.

### Process of succession:-

The entire process of primary autotrophic succession is completed through the following sequential steps:

- 1) Nudation: This is development of a bare area without any form of life. Exposure of new surface may occur due to several causes such as landslides, erosion, deposition etc. These causes of nudation are of three types:
  - (i) Topographic (eg. soil erosion, landslide, volcanic eruption etc)
  - (ii) Climatic (eg. glacial, hail, storms, fire etc)
  - (iii) Biotic (eg. epidemic, human activity).

# ECOLOGICAL SUCCESSION

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(part B)

- Invasion: It involves successful establishment of a species in a bare area. It involves 3 steps.
- a) Migration: It involves reaching seed, spores etc. in a bare area through air, water etc.
- b) Ecosis (establishment): It involves the successful adjustment of a species with the prevailing conditions of the area.
- c) Aggregation: It involves the increase in number of organisms through the process of reproduction.
- ③ Competition and Co-action: It involves the development of intraspecific as well as interspecific competition among the members due to their large number but limited food and space.
- d) Reaction: It involves the modification of the environment through the influence of living organisms. The modified area <sup>become</sup> ~~is~~ least favourable for the existing community which is sooner or later replaced by another community called Seral Community and the process is repeated. The whole sequence of community which replaces one another in the given area is called Sere and various communities constituting the sere is called Seral Community.
- 5) Stabilization (climax):

Finally, there occurs a stage in the process, when the final terminal community becomes more or less stabilized for a long<sup>er</sup> period of time and it can maintain itself in equilibrium with the climate of the area. The final community is not replaced and is known as climax community.