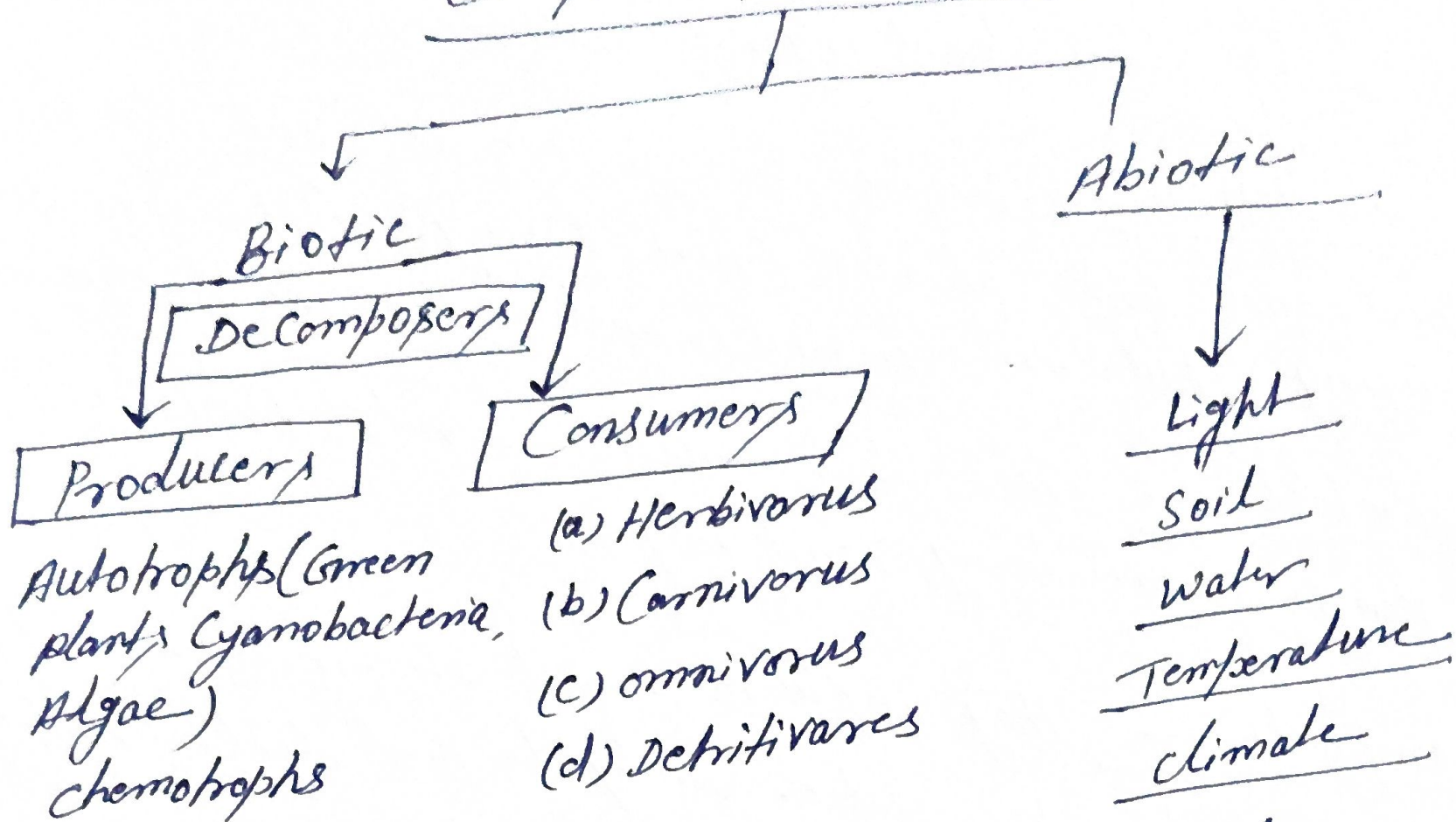


Components of Ecosystem



BIOTIC FACTORS : — Biotic factors are all living components of an ecosystem that shape their environment, including animals, plants, fungi, bacteria, and humans. These organisms interact through relationships like predation, competition, symbiosis, acting as producers, consumers, or decomposers to maintain ecological balance. Examples include predators (lions), prey (gazelles), producers (trees), and decomposers (bacteria).

Aspects of Biotic Factors

Producers (Autotrophs) — organisms that produce their own food. Such as plants, algae, and some bacteria.

Consumers (Heterotrophs) : — Animals that depend on producers or other consumers for food.

Decomposers (Saprotrophs) — Bacteria and fungi that break down dead organic matter.

Interactions — Biotic factors interact with each other and with abiotic (non-living) factors, influencing population dynamics and ecosystem structure.

Examples: — Trees, deer, insects, birds, bacteria, fungi, human beings, and algae.

Impact — They influence and are influenced by abiotic factors like water, sunlight, and soils creating a functioning ecosystem.

Examples of interactions

Predation: — A wolf (biotic) hunting a rabbit (biotic).

Competition: — Two species of plants competing for sunlight in a forest.

Symbiosis: — Bees (biotic) pollinating flowers (biotic).

Decomposition: — Bacteria and fungi (biotic) breaking down a fallen tree (biotic).