Q1) What is 10% law related to food chain?

Ans - 10% law, when organisms are consumed, approximately 10% of the energy in the food is fixed into their flesh and is available for next trophic level (carnivores or omnivores). When a carnivore or an omnivore in turn consumes that animal, only about 10% of energy is fixed in its flesh for the higher level.

Q2) What are the different types of relationships between the components of ecosystem? Name them and give one example from each.

ans - Biotic components of ecosystem :-

The living components of an ecosystem are called the biotic components. Some of these factors include plants, animals as well as fungi and bacteria. These biotic components can be further classified, based on the energy requirement source. Producers, consumers, and decomposers are the three broad catagories of biotic components.

* Producers :- Producers are the plants in the ecosystem, which can generate their own energy requirement through photosynthesis, in the presence of sunlight and chlorophyll. All other living beings are dependent on plants for their energy requirement of food as well as oxygen.

* Consumers :- Consumers include herbivores, carnivores and omnivores. The herbivores are the living organisms that feed on plants. Carnivores eat other living organisms. Omnivores are animals that can eat both plant and animal tissue. Ex - cow, human beings, lion.

* Decomposers :- Decomposers are the fungi and bacteria, which are the saprophytes. They feed on the decaying organic matter and convert these matter into nitrogen and carbon dioxide. The saprophytes play a vital role in recycling the nutrients so that the producers, i.e., plants can use them once again.

ABIOTIC COMPONENTS OF ECOSYSTEM :-
Abiotic components are the physical and/or the chemical factors that act on the living organisms at any part of their life. These are also called as the ecological factors. The physical and chemical factors are characteristics of the environment. Light, air, soil and nutrients, etc. From the abiotic components of an ecosystem.