

Date
20.05.2020

Page no. :- 01

Serial _____
Date _____
Page _____

Dr. Rajesh Verma, Assistant professor and Head, U.G. Department of Zoology Durgam Chauri (Buxar). Notes for B.Sc part 1st, paper 2 (A).

Question :- Energy flow ko classify krke hue sochna karon kare?

Answer :-

Energy flow in an ecosystem :-

Energy has been defined as the capacity to do work. Energy exists in two forms potential and kinetic.

Potential energy is the energy at rest (i.e., stored energy) capable of performing work. Kinetic energy is the energy of motion (i.e., energy).

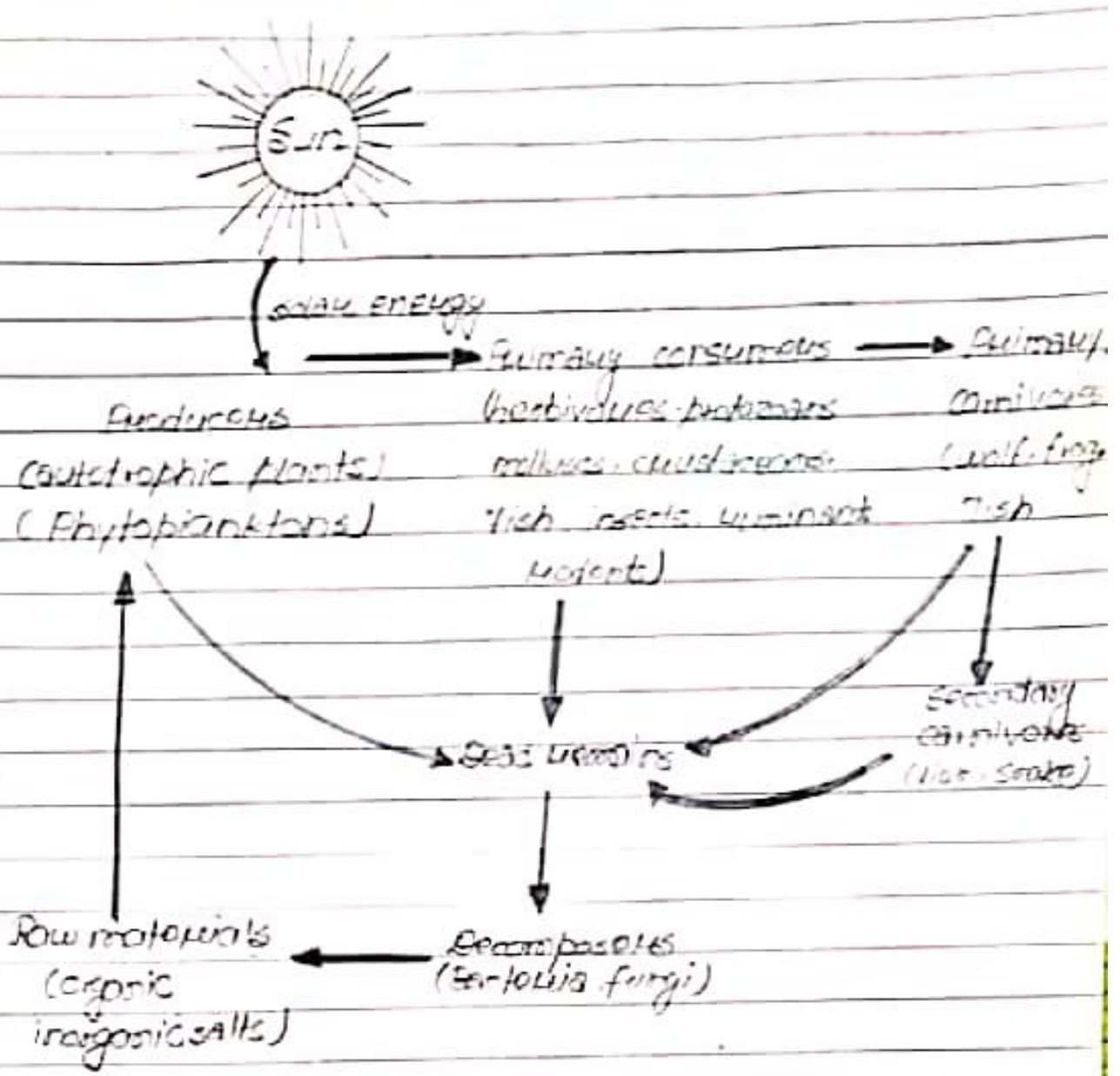
The source of energy required all living organisms is the chemical energy of their food. The chemical energy is obtained by the conversion of the radiant energy of sun.

Energy flow in ecosystems :-

Living organisms can use energy in two forms radiant

and fixed energy. Radiant energy is in the form of electromagnetic waves, such as light. Fixed energy is potential chemical energy bound in various organic substances which can be broken down in order to release their energy content.

Organism that can fix radiant energy utilizing inorganic substances to produce organic molecules are called autotrophs. Organisms that cannot obtain energy from abiotic source but depend on energy rich organic molecules synthesized by autotrophs are called heterotrophs. Those which obtain energy from living organisms are called consumers and those which obtain energy from dead organisms are called decomposers. It states that the amount of energy in the universe is constant. It may change from one form to another, but it can neither be created nor destroyed.



Flow of energy at different levels of ecosystem

⇒ Distrubuted food chain :-

The dead organic remains including metabolic wastes and exudates derived from grazing food chain are generally termed detritus. The energy contained in detritus is not lost in ecosystem.

as a whole, rather it serves as a source of energy for a group of organisms called detritivores that are separate from the grazing food chain. The food chain so formed is called detritus food chain.

