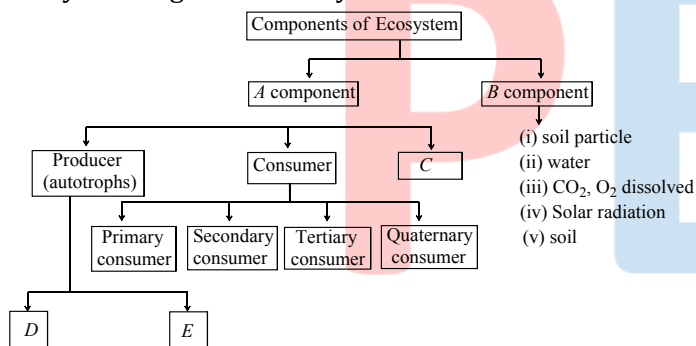


## Topic :- Ecosystem

- Stability of ecosystem depends upon
  - Primary productivity
  - Interchange between producers and consumers
  - Number of producers
  - Number of consumers
- Mr. X is eating curd/yoghurt. For this food intake in a food chain, he should be considered as occupying
  - First trophic level
  - Second trophic level
  - Third trophic level
  - Fourth trophic level
- Study the diagram carefully and fill in the blanks



Choose the correct option for *A, B, C, D* and *E*

- A-Biotic, B-Abiotic, C-Decomposers, D-Photoautotrophs, E-Chemoautotrophs
  - A-Physical, B-Chemical, C-Phytoplanktons, D-Plants, E-Parasites
  - A-Biotic, B-Abiotic, C-Decomposers, D-Autotrophs, E-Mixotrophs
  - A-Physical, B-Chemical, C-Bacteria and Fungi, D-Autotrophs, E-Heterotrophs
- A pyramid of number in grassland ecosystem shows
    - There are always a large number of producers at the bottom and fewer top consumers
    - There are always a large number of top consumers and fewer producers
    - There are an equal number of producers and consumers
    - There are more top consumer than primary consumers
  - Phosphorus is needed for the production of
    - DNA and RNA
    - Cellular membranes
    - Bones and teeth
    - All of these
  - Which of the following statement is true about ecosystem?
    - The term 'ecosystem' was coined by Sir AG Tansley
    - The size of the ecosystem varies from small pond to a large forest or sea

- c) In a forest ecosystem, trees occupy top vertical strata or layer, shrubs occupies the second layer and herbs and grasses occupies the bottom layers  
d) All of the above
7. Which food chain correctly describes the flow of energy in an ecosystem?  
a) Grass → cow → human  
b) Caterpillar → leaf → human  
c) Cow → grass → human  
d) Leaf → bird → caterpillar
8. Phosphorus is the major constituent of  
I. biological membranes  
II. nucleic acids  
III. cellular energy transfer system  
Choose the correct option  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
9. The biomass available for consumption by the herbivores and the decomposers is called  
a) Net primary productivity  
b) Secondary productivity  
c) Standing crop  
d) Gross primary productivity
10. 'Sun basket' is  
a) The device to utilize sun rays directly to meet the requirement of heat energy  
b) The sufficient amount of sunlight stored in a cell  
c) A device of taking sunbath  
d) All of the above
11. In a grazing food chain carnivores may also be referred to as  
a) Primary producers  
b) Secondary producers  
c) Primary consumers  
d) Secondary consumers
12. In a food chain, the total amount of living material is depicted by  
a) Pyramid of biomass    b) Pyramid of energy    c) Pyramid of number    d) Trophic levels
13. In an ecosystem, the insectivorous plants are placed in  
a) Herbivores                      b) Primary producers    c) Predators                      d) None of these
14. Find the correct statement  
a) Low temperature and aerobic conditions inhibit decomposition  
b) Plants capture only 2-10%, of the PAR and sustain the entire living world  
c) In aquatic and terrestrial ecosystems the GFC is the major conduit for energy flow  
d) Measurement of biomass in terms of fresh weight is more accurate than dry weight
15. The rate at which organic compounds are formed in a green plant or in a population of green plants per unit time and area is known as the  
a) Net primary productivity                      b) Gross primary productivity  
c) Community productivity                      d) Secondary productivity
16. The correct sequence of plants in a hydrosere is  
a) Oak → *Lantana* → *Scirpus* → *Pistia* → *Hydrilla* → *Volvox*  
b) *Volvox* → *Hydrilla* → *Pistia* → *Scirpus* → *Lantana* → Oak  
c) *Pistia* → *Volvox* → *Scirpus* → *Hydrilla* → Oak → *Lantana*  
d) Oak → *Lantana* → *Volvox* → *Hydrilla* → *Pistia* → *Scirpus*

17. A sequence of species or organism through which the food energy pass in a community is called  
 a) Pyramid of energy    b) Food chain    c) Food web    d) Nutrient cycle
18. Detritus food chain law accounts for more energy flow than garzing food chain because  
 a) Most organisms die without having being eaten  
 b) Most organisms do not die  
 c) Most organisms having being eaten  
 d) None of the above
19. Select the formula for ecological efficiency.
- |  |  |
|--|--|
| a) $\frac{\text{Gross primary productivity}}{\text{Incident total solar radiatio}} \times 100$ | b) $\frac{\text{Food energy assimilated}}{\text{Food energy ingested}} \times 100$   |
| c) $\frac{\text{Net primary productivity}}{\text{Gross primary productivity}} \times 100$      | d) $\frac{\text{Energy in biomass production at trophic level}}{\text{Energy in biomass production at previous trophic level}} \times 100$ |
20. Primary consumers are  
 a) Carnivores    b) Herbivores    c) Decomposers    d) Omnivores

PE