



TARGET : NEET (UG) 2024

Course : SARANSH (Youtube Live CRASH COURSE)

BIOLOGY

DPP

DAILY PRACTICE PROBLEMS

DPP NO. 1

BOTANY : ECOSYSTEM

DPP No. : 1

- If 20 J of energy is trapped at producer level, then how much energy will be available to peacock as food in the following chain?
plant → mice → snake → peacock
(1) 0.02 J (2) 0.002 J (3) 0.2 J (4) 0.0002 J
- Vertical distribution of different species occupying different levels in a biotic community is known as:
(1) Stratification (2) Zonation (3) Pyramid (4) Divergence
- The mass of living material at a trophic level at a particular time is called:
(1) Standing state (2) Net primary productivity
(3) Standing crop (4) Gross primary productivity
- What type of ecological pyramid would be obtained with the following data?
Secondary consumer : 120 g
Primary consumer : 60 g
Primary producer : 10 g
(1) Inverted pyramid of biomass (2) Upright pyramid of biomass
(3) Upright pyramid of numbers (4) Pyramid of energy
- Which of the following statement is **incorrect**
(1) Biomass decreases form first to fourth trophic level
(2) Energy content gradually increases from first to fourth trophic level
(3) Number of individuals decreases from first trophic level to fourth trophic level
(4) Energy content gradually decreases from first to fourth trophic level
- In the equation $GPP - R = NPP$ R represents:
(1) Retardation factor (2) Environment factor
(3) Respiration losses (4) Radiant energy

7. Given below are two statements:
- Statement I:** Decomposition is a process in which the detritus is degraded into simpler substances by microbes
- Statement II:** Decomposition is faster if the detritus is rich in lignin and chitin
- In the light of the above statements, choose the correct answer from the options given below:
- (1) Statement I is correct but Statement II is incorrect
 - (2) Statement I is incorrect but Statement II is correct
 - (3) Both Statement I and Statement II are correct
 - (4) Both Statement I and Statement II are incorrect
8. Given below are two statements :
- Statement-I :** Pyramid of energy is always upright and is the most efficient.
- Statement-II :** Pyramid of biomass in sea is generally inverted. In the light of the above statements, choose the most appropriate answer from the options given below:
- (1) Statement-I is incorrect but Statement-II is correct
 - (2) Both Statement-I and Statement-II are correct
 - (3) Both Statement-I and Statement-II are incorrect
 - (4) Statement-I is correct but Statement-II is incorrect
9. Identify the **correct** statements :
- A. Detritivores perform fragmentation.
 - B. The humus is further degraded by some microbes during mineralization.
 - C. Water soluble inorganic nutrients go down into the soil and get precipitated by a process called leaching.
 - D. The detritus food chain begins with living organisms.
 - E. Earthworms break down detritus into smaller particles by a process called catabolism.
- Choose the **correct** answer from the options given below :
- (1) B, C, D only
 - (2) C, D, E only
 - (3) D, E, A only
 - (4) A, B, C only
10. Highest value in $\text{g/m}^2/\text{yr}$ of a grassland ecosystem would be
- (1) Gross primary production
 - (2) Net primary production
 - (3) Secondary production
 - (4) Tertiary production