

Class : XIIth
Date :

Subject : BIOLOGY
DPP No. : 2

Topic :-Ecosystem

1. In grazing food chain energy comes from
 a) Organic remain b) Air c) Water d) All of these

2. The amount of usable energy, which is available for doing work, when the temperature and pressure are uniform throughout the system is called
 a) Enthalpy b) Activation energy c) Spontaneous energy d) Free energy

3. Which one of the following is correct for xerarch succession?
 a) Successional series from xeric to mesic condition
 b) Successional series from hydric to mesic condition
 c) Both (a) and (b)
 d) None of the above

4. Biotic components refer to
 a) Gases produced by industries
 b) Nutrient-deficient soil
 c) Living organisms
 d) Fossil fuels

5. Which one of the following is correct matching of a plant, its habitat and the forest type where it normally occurs?
 a) *Prosopis*, tree, scrub b) *Saccharum officinarum*, grass, forest
 c) *Shorea robusta*, herb, tropical rain forest d) *Acacia catechu*, tree, coniferous forest

6. Select the options that correctly identifies *A, B* and *C* in the given table

Organisms	Trophic Level	Types of Food Chains
Eagle	<i>A</i>	Grazing
Earthworm	Primary consumer	<i>B</i>
<i>C</i>	Secondary consumer	Grazing

- a) A-Secondary consumer, B-Grazing, C-Algae b) A-Top carnivore, B-Detritus, C-Frog
- c) A-Scavenger, B-Grazing, C-Hawk d) A-Decomposer, B-Detritus, C-Perch

7. What is common in earthworm, soil mites and dung beetle in an ecosystem?
 a) They all are detritivores b) Primary consumer
 c) Secondary consumer d) Tertiary consumer

8. Which one of the following is involved in sedimentary cycle?
 a) Carbon b) Nitrogen c) Hydrogen d) Phosphorus
9. Which of the following pyramid is always upright and can never be inverted?
 a) Pyramid of biomass b) Pyramid of number c) Pyramid of energy d) Both (a) and (c)
10. Choose the correct statements
 I. Productivity is expressed in $\text{gm}^{-2}\text{yr}^{-1}$ or $(\text{kcal m}^{-2})\text{yr}^{-1}$
 II. The amount of biomass or organic matter produced per unit area over a time period in plants during photosynthesis is called primary production
 III. Primary production is expressed in term of weight (g^{-2}) or energy (kcal m^{-2})
 IV. Sugarcane have more efficiency to trap sunlight, so they accumulate more primary productivity
 Choose the correct option
 a) I and II b) I and IV c) I, II, III and IV d) None of these
11. The 10% law is related to
 a) Mendelian genetics
 b) Non-Mendelian genetics
 c) Energy transfer from lower trophic to higher trophic level
 d) Energy consumption during photosynthesis in C_4 -plants
12. Which of the following two organisms are producers?
 a) Plants and phytoplanktons b) Plants and consumers
 c) Zooplanktons and phytoplanktons d) Phytoplanktons and chlorophyll
13. Consider the succession of plants
 I. In hydrarch succession series progress from hydric to the mesic condition
 II. In xerarch succession series progress from xerarch to the mesic condition
 III. In xerarch succession if it is started on bare rock the pioneer species is lichens
 IV. In hydrarch and xerarch succession series progress from mesarch to xerarch condition
 Which of the following is correct combination match from above statements?
 Choose the correct option
 a) II and III b) III and IV c) II and IV d) I, II and III
14. Which creatures are direct or indirect food of all creatures on the ocean's surface?
 a) Protozoans b) Phytoplankton c) Fish d) Aquatic insects
15. An inverted pyramid of ...A... may occasionally be observed in ...B... communities
 a) A-energy; B-grassland b) A-energy; B-forest
 c) A-biomass; B-marine d) A-biomass; B-grassland
16. Which one of the following is not a functional unit of an ecosystem?

a) Productivity b) Stratification c) Energy flow d) Decomposition

17. Which one of the following types of organisms occupy more than one trophic level in a pond ecosystem?

a) Phytoplankton b) Fish c) Zooplankton d) Frog

18. Humus is

- a) Dark coloured amorphous organic matter rich in lignin
- b) Dark coloured organic matter rich in cellulose
- c) Both (a) and (b)
- d) Red coloured substances rich in iron

19. In terrestrial ecosystem such as forest, maximum energy is found in which trophic level?

a) T₁ b) T₂ c) T₃ d) T₄

20. Frog, that feeds on insects, is a

- a) Primary consumer
- b) Secondary consumer
- c) Tertiary consumer
- d) Decomposer

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