

1. Consider the following statements:
 1. Primary productivity is constant across different types of ecosystems.
 2. Secondary productivity is defined as the rate of formation of new organic matter by consumers.Which of the statements given above is/are NOT CORRECT?
 - a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
2. Consider the following statements:
 1. Primary Carnivores are also the primary consumers.
 2. Death of organism is the beginning of the detritus food chain/web.Which of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
3. Consider the following statements:
 1. Each trophic level has a certain mass of living material at a particular time called as the standing crop.
 2. The biomass of a species is expressed only in terms of dry weight.Which of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
4. Consider the following statements:
 1. The pyramid of biomass in sea is generally inverted.
 2. A given species may occupy more than one trophic level in the same ecosystem at the same time.Which of the statements given above is/are NOT CORRECT?
 - a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
5. Consider the following statements:
 1. Atmospheric inputs of carbon through rainfall are much smaller than phosphorus inputs.
 2. Gaseous exchanges of phosphorus between organism and environment are negligible.Which of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
6. Which of the following best defines the permaculture?
 - a) Permaculture is a system of agriculture and aquaculture within the ecological carrying capacity of the region.
 - b) Permaculture is a system of agricultural and social design principles centered on simulating or directly utilizing the patterns and features observed in natural ecosystems.
 - c) Permaculture is a system of agriculture and agro based industry developing side by side.
 - d) None of the above
7. Which of the following statements correctly explains the 10 per cent law in context of ecology?
 - a) Only 10 per cent of the energy is transferred to each trophic level from the lower trophic level.
 - b) Biomass in one trophic level is only 10% of the lower trophic level.
 - c) With 10 per cent increase in sunlight the vegetation growth in an ecosystem gets doubled.
 - d) With increase in global warming the temperature will increase by 10 per cent.
8. Which of the following statements regarding Ecological succession is/are correct?
 1. Hydrarch succession takes place in wetter areas and the successional series progress from hydric to the mesic conditions.

2. Xerarch succession takes place in dry areas and the series progress from xeric to mesic conditions. Select the correct answer using the code given below:
- 1 only
 - 2 only
 - Both 1 and 2**
 - Neither 1 nor 2
9. "The entire complement of species of organisms, plants and animals found within a given region". Select the correct term related to the phrase:
- Community
 - Biotype
 - Biota**
 - Biome
10. Consider the following statements with regard to the general characteristics for Lake Ecology:
- The nutrient content is very low in Oligotrophic whereas nutrient content is very high in Eutrophic
 - Oxygen in the hypolimnion is present in Eutrophic whereas is absent in Oligotrophic.
- Which of the above statements is/are correct?
- 1 only**
 - 2 only
 - Both 1 and 2
 - Neither 1 nor 2
11. 'Operation Warp Speed' is associated with which of the following?
- ASEAN
 - European Union
 - USA**
 - BRICS
12. Consider the following statements with respect to 'Xenobots'.
- It is both a living thing made of living cells and a machine that the researchers can program to express certain behaviors.
 - It is named after the species of aquatic frog found across sub-Saharan Africa from Nigeria and Sudan to South Africa.
- Select the correct statements
- 1 only
 - 2 only
 - Both 1 and 2**
 - Neither 1 nor 2
13. Which of the following pairs are correctly matched?
- Organization – Countries
- National Rally – Iraq
 - AfD – France
 - Antifa – USA
- Select the correct code:
- 1 and 2
 - 2 and 3
 - 3 Only**
 - 1, 2 and 3
14. Which of the following statements is correct with respect to 'Crew Dragon'?
- It is a spaceship built by SpaceX.**
 - It is a submarine indigenously built by India.
 - It is a UAV developed by China.
 - It is a supersonic missile developed by Russia.
15. Consider the following statements with respect to 'Great White Sharks'.
- It is listed as 'Critically Endangered' under the IUCN Red List.
 - Young white sharks take birth in designated 'nurseries', where they are protected from other predators until they grow into adults.
- Select the correct statements
- 1 only
 - 2 only**

- c) Both 1 and 2
d) Neither 1 nor 2
16. With reference to trans fatty acids (TFA), consider the following statements:
1. The natural TFAs are present in meats and dairy products.
2. They have adverse effects on a human body.
Which of the statements given above is/are correct?
a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2
17. Consider the following statements:
1. Nendran Bananas are cultivated in Thrissur district of Kerala.
2. The Nendran Bananas got their Geographical Indication (GI) Tag in 2014.
3. IIT-Madras has developed a new product called Banana Grit from the raw Nendran Bananas.
Which of the statements given above is/are not correct?
a) 1 and 2 only
b) 2 only
c) **3 only**
d) 2 and 3 only
18. Which of the following international treaties and conventions are signed by India to combat drug menace?
1. United Nations (UN) Convention on Narcotic Drugs (1961)
2. UN Convention on Psychotropic Substances (1971)
3. UN Convention against Transnational Organized Crime (UNTOC) 2000
Select the correct answer using the code given below:
a) 1 and 2 only
b) 2 and 3 only
c) 1 only
d) **1, 2 and 3**
19. With reference to RailTel, consider the following statements:
1. RailTel is a Maharatna Central Public Sector Enterprise.
2. It has been selected for implementation of Bharat Net project.
Which of the statements given above is/are correct?
a) 1 only
b) **2 only**
c) Both 1 and 2
d) Neither 1 nor 2
20. With reference to Lightning, consider the following statements:
1. Collisions between smaller ice crystals and larger ones in the clouds generates the electric sparks.
2. The difference in electrical charge between the top and bottom of a cloud, results in lighting.
3. The Earth is a good conductor of electricity
Which of the statements given above are correct?
a) 1 only
b) 2 and 3 only
c) 1 and 2 only
d) **1, 2 and 3**
21. Consider the following statements:
1. La Nina typically has a cooling effect on global temperatures.
2. El Nino and the Southern Oscillation (ENSO) cycle is a periodic fluctuation in sea surface temperatures and pressure across the Atlantic Ocean.
Which of the statements given above is/are correct?
a) **1 only**
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
22. With reference to the Prevention of Cruelty to Animals Act, 1960, consider the following statements:

1. The Animal Welfare Board of India was set up in 1962 under the Prevention of Cruelty to Animals Act.
2. The Act provides guidelines relating to experimentation on animals for scientific purposes. Which of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) **Both 1 and 2**
 - d) Neither 1 nor 2
23. Consider the following statements regarding 'Indian Pangolin'
 1. It is protected under the Schedule I of Wildlife Protection Act, 1972.
 2. The species is found at an elevation above 2500 m in the Eastern Himalayas.Which of the statements given above is/are correct?
 - a) **1 only**
 - b) 2 only
 - c) Both 1 and 2
 - d) Neither 1 nor 2
24. With reference to COVAXIN vaccines, consider the following statements:
 1. It is an inactivated vaccine that destroys the ability of the pathogen to replicate.
 2. It aims to develop an immune response to the nucleocapsid protein.Which of the statements given above is/are correct?
 - a) 1 only
 - b) 2 only
 - c) **Both 1 and 2**
 - d) Neither 1 nor 2
25. Strait of Hormuz connects which of the following water bodies?
 - a) Red Sea & Persian Gulf
 - b) **Persian Gulf & Gulf of Oman**
 - c) Red Sea & Gulf of Aden
 - d) Persian Gulf & Gulf of Aden