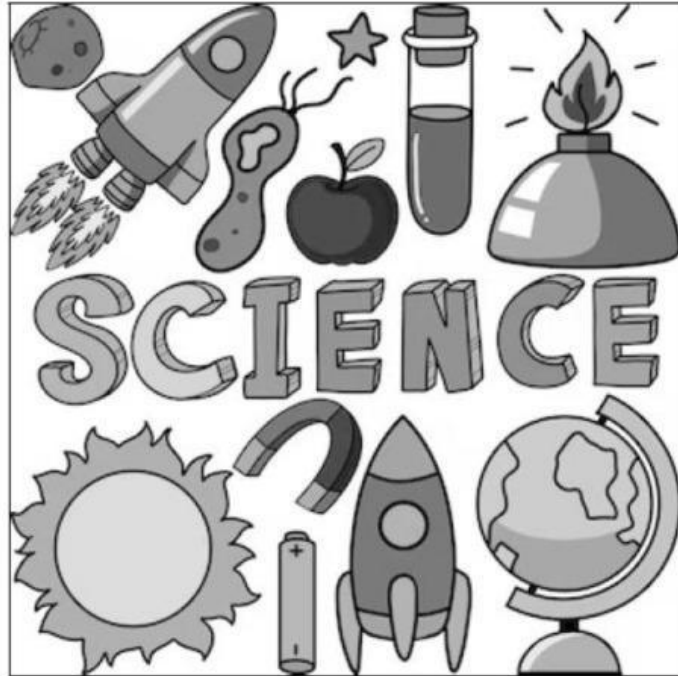


## Science and Technology



### Instructions:

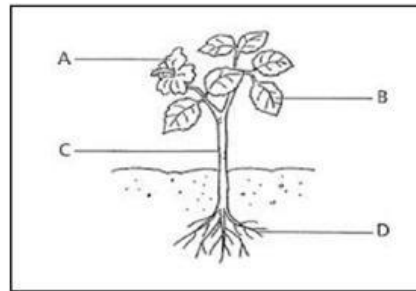
This test has 30 questions. You have 1 hour to answer them. Each question has three possible answers: (A), (B), (C). Read each question carefully then select the best answer.

Circle the letter that corresponds to the correct answer that you have chosen.

Instructions: Use the diagram below to answer question 1.

1. The part of the plant labeled **(D)** below is the \_\_\_\_\_

- a) stem
- b) flower
- c) roots

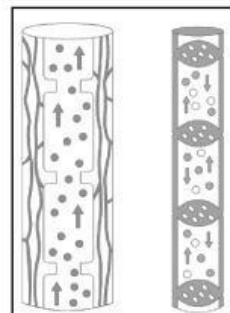


2. The process by which plants use sunlight, carbon dioxide and water to create their own food is known as \_\_\_\_\_.

- a) Transpiration
- b) Photosynthesis
- c) Translocation

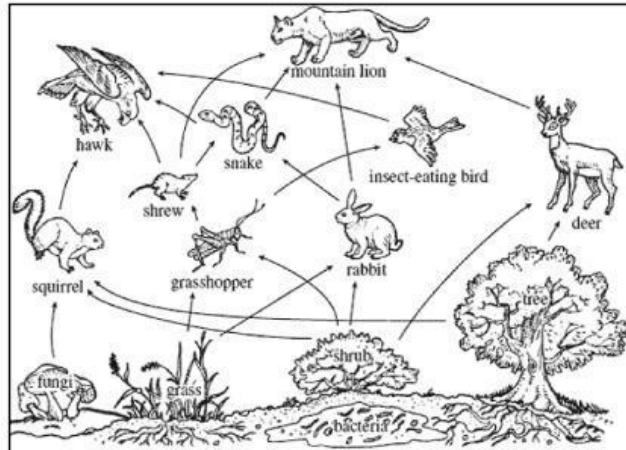
3. All of the following statements are **TRUE** about the Phloem Vessels in plants **EXCEPT** :

- a) They transport food which the plant makes to every part of the plant.
- b) They transport water and minerals in one direction only: roots to leaves.
- c) They contain living cells and sieve tubes



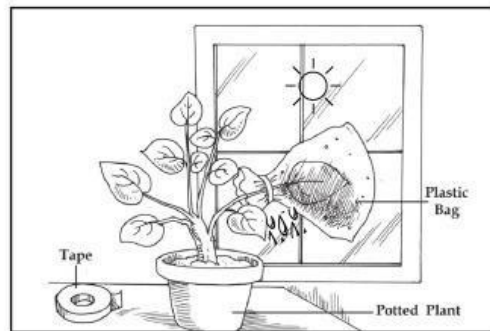
4. Rain-forests, Deserts and Grassland Ecosystems are all examples of \_\_\_\_\_ ecosystems.
- a) Terrestrial                      b) Marine                      c) Freshwater

**Instructions: Use the Food Web below to answer questions 5 and 6.**



5. The Primary Consumers are the \_\_\_\_\_
- a) Hawk, mountain lion, insect-eating bird and snake  
b) Squirrel, grasshopper, rabbit and deer  
c) Fungi, Grass, shrub and tree
6. If grasshoppers became extinct, which of the following **WOULD LEAST LIKELY OCCUR?**
- a) The population of insect-eating birds would decrease  
b) The population of insect-eating birds would increase  
c) Insect-eating birds would migrate in search for another food source.

**Instructions: Use the illustration below to answer question 7.**



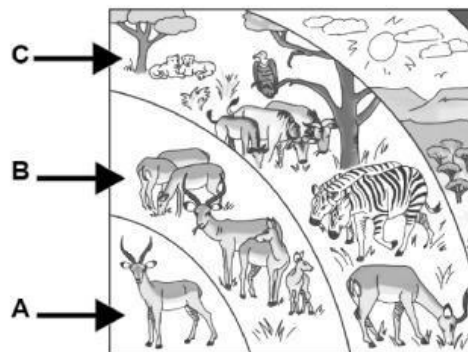
7. The experiment above shows water droplets from the leaves of the plant due to the sun's heat. This process is known as \_\_\_\_\_

- a) Transpiration                      b) Respiration                      c) Photosynthesis

**Instructions: Use the illustration below to answer question 8.**

8. **B** represents the \_\_\_\_\_ within the ecosystem.

- a) Organism  
b) Population  
c) Community



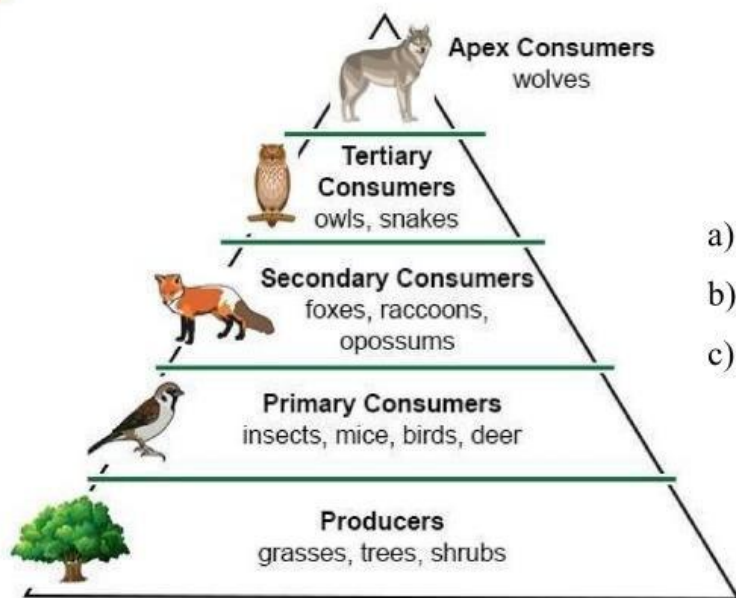
9. Which statement is **TRUE**?

- a) An organism is part of a community.
- b) A community is part of a population.
- c) A population is part of a community

10. Which of the following correctly shows the organization in an ecosystem, from the smallest to the largest level? \_\_\_\_\_

- a) Ecosystem, Community, Population, Organism
- b) Organism, Population, Community, Ecosystem
- c) Population, Community, Ecosystem, Organism

11. A \_\_\_\_\_ is represented in the diagram below?



- a) Food chain
- b) Food web
- c) Trophic levels



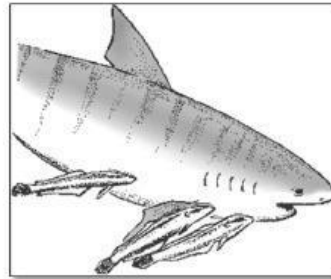
12. The air, sunlight, temperature, soil and water within an environment are referred to as \_\_\_\_\_

- a. abiotic factors                      b) biotic factors                      c) living things

**Instructions: Use the diagram below to answer question 13**

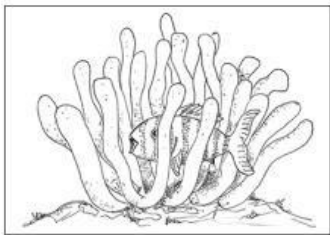
13. The remora fish travels alongside the shark to benefit from the leftovers after its feed. The remora fish poses no threat and the shark is unaffected by its presence. This symbiotic relationship is an example of \_\_\_\_\_

- a) Mutualism  
b) Commensalism  
c) Parasitism



14. Which of the following are examples of a parasitic symbiotic relationship?

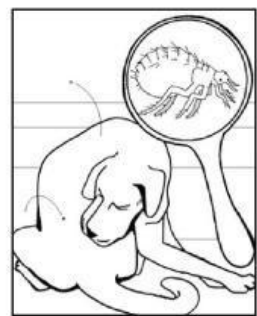
- a) i and ii                      b) ii and iii                      c) iii and i



(i) clownfish and sea anemone



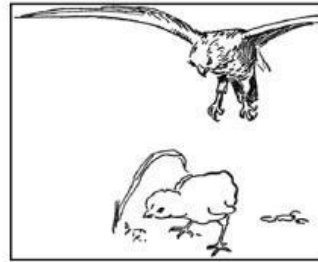
(ii) leaf spot disease



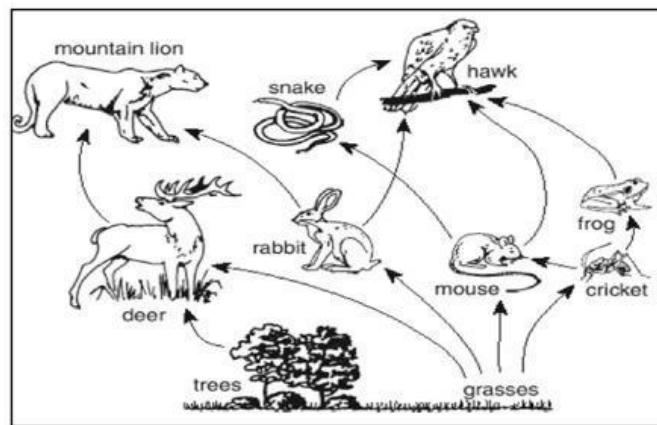
(iii) ticks on dogs

15. The image in the diagram shows a hawk about to capture a chick. This is an example of \_\_\_\_\_

- a) Predation
- b) Competition
- c) Camouflage



**Instructions:** Use the diagram below to answer questions 16 and 17.



16. In the picture above, the omnivore is the \_\_\_\_\_.

- a) deer
- b) mouse
- c) frog

17. How many preys are there in the picture? \_\_\_\_\_.

- a) 8
- b) 6
- c) 2

18. Two male lions fighting for a mate is an example of \_\_\_\_\_

- a) Interspecific Competition
- b) Intraspecific Competition
- c) Predator-Prey Relationship



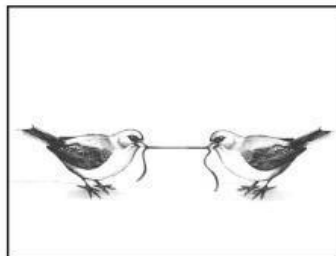
19. Which picture below depicts Interspecific Competition amongst organisms?

a) i



(i) Gazelles and Zebras  
at the same water hole

b) ii



(ii) two birds fighting  
over a worm

c) iii



(iii) seedlings competing  
for sunlight and space

20. The Vulture in the picture is a \_\_\_\_\_

- a) top predator
- b) scavenger
- c) decomposer





21. What group do fungi, bacteria, maggots and worms belong to?

- a) Decomposers
- b) Scavengers
- c) Producers

22. What would **MOST LIKELY HAPPEN** if an ecosystem no longer received Sunlight?

- a) The number of herbivores would increase
- b) The number of plants would increase
- c) All living organisms would eventually die

23. If the population of prey increases within an ecosystem, then the predator population will \_\_\_\_\_ because of the availability of food.

- a) increase
- b) stay the same
- c) decrease

**Instructions: Use the diagram below to answer question 24**

24. Which option correctly describes the molecules of the following states of matter in the order that they appear below?



- a) Solids, liquids and gases
- b) Gases, liquids and solids
- c) Liquids, gases and solids

25. Which one of the following **IS NOT** an example of a gas? \_\_\_\_\_

- a) Diesel
- b) Carbon dioxide
- c) Water vapour

26. Which of the following is a property of Liquids?

- a) Liquids have a definite shape and volume.
- b) Liquids flow and take the shape of their containers.
- c) Liquids can be compressed or they spread out to fill available space.

27. Which of the following is an example of a chemical change in matter \_\_\_\_\_

- a) Food scraps decomposing in a compost pile
- b) Water droplets forming on the outside of a cold glass of water
- c) A chocolate bar left in the car, melting because of the sun's heat.

28. Rusting, growing up and burning are all examples of \_\_\_\_\_ changes.

- a) irreversible
- b) reversible
- c) physical

29. Dry ice is stored in a fire extinguisher in a solid form but when sprayed on a fire, It quickly changes into a gas called carbon dioxide. This change in the states of matter is called \_\_\_\_\_

- a) Evaporation
- b) Sublimation
- c) Condensation

30. In the diagram below, which change in the state of matter is represented by **B**?

a) **Condensation**

b) **Melting**

c) **Evaporation**

