



Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 35

1 Key words**[4]**

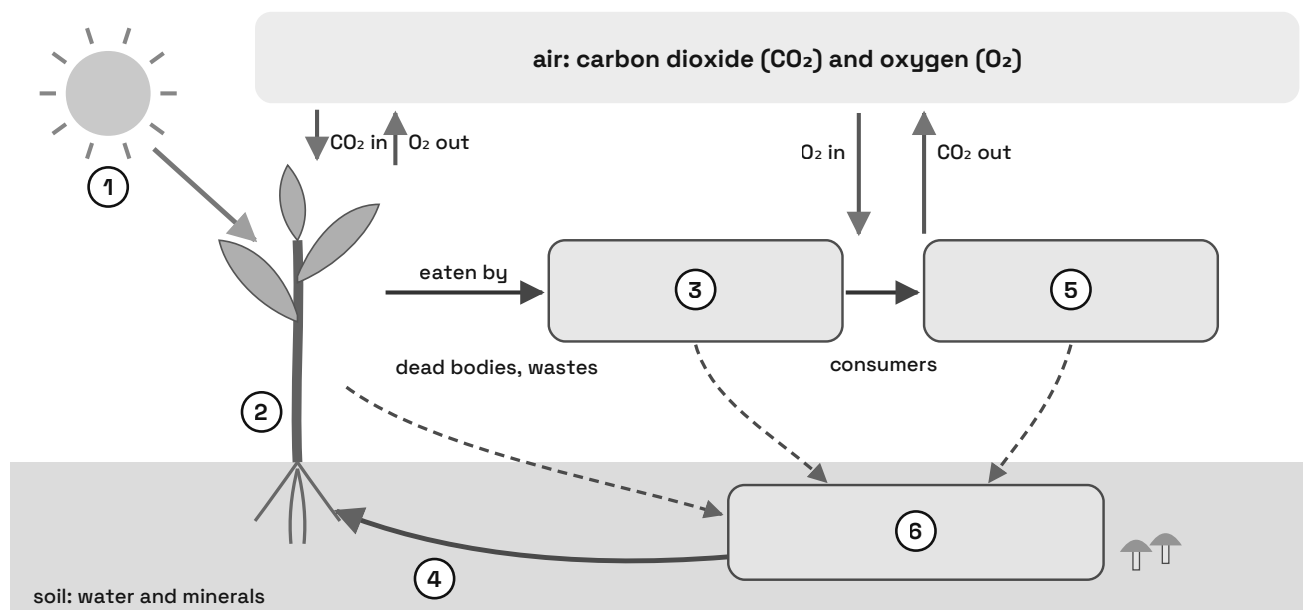
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

abiotic biotic community ecosystem food web predation producers Tansley
trophic level zooplankton

The whole system formed by a community of living things and their physical environment is called an _____; the word was first used by Arthur George _____ in 1935. A group of populations of different species living together in one place is a _____. The living part of an ecosystem is its _____ component, and the non-living part is its _____ component. Living things that make their own food are called _____. Each step in a food chain is a _____, and a network of many food chains linked together is a _____.

2 Label the diagram**[3]**

The diagram shows how the living and non-living parts of an ecosystem are linked. Write the names of the parts numbered 1 to 6. Each carries 0.5 mark.



1. _____

2. _____

3. _____

4. _____

5. _____

6. _____



[5]

Choose the correct option for each of the following questions.

- i. Which of these is a decomposer? [1]
 - a. algae
 - b. insect
 - c. mushroom
 - d. lichen
- ii. Which is the first trophic (feeding) level? [1]
 - a. green plants
 - b. insects
 - c. frog
 - d. snake
- iii. What kind of interaction is found in a lichen on tree bark? [1]
 - a. mutualism
 - b. commensalism
 - c. parasitism
 - d. competition
- iv. In the chain **grass → grasshopper → frog → snake → eagle**, which trophic level is the frog? [1]
 - a. the second
 - b. the third
 - c. the fourth
 - d. the first
- v. Akashbeli, a yellow creeper with no leaves, twists around a hedge and takes all its food from it. What kind of interaction is this? [1]
 - a. mutualism
 - b. commensalism
 - c. parasitism
 - d. predation

[3]

Write very short answers to the following questions.

- a. What are the microscopic producers that drift in ponds, lakes and seas called? [1]
-
-
- b. About what part of the energy at one trophic level reaches the next level? [1]
-
-
- c. A cattle egret catches the insects stirred up by a grazing buffalo. Name this interaction. [1]

[8]

Write short answers to the following questions.

- a. Give a reason: an ecosystem is disturbed if there are no decomposers. [2]



b. Give a reason: in a food chain, there are usually more producers than consumers. [2]

c. Write any two differences between a food chain and a food web. [2]

d. Write any two differences between mutualism and commensalism. [2]

6 Long answers [8]

Write long answers to the following questions.

a. A farmer killed all the mice that ate his rice, but then his rice harvest became much smaller. Why? Explain with an example. [4]

b. Name the kinds of interaction between living things and explain any four, with an example of each. [4]



[2]

In the food chain grass → grasshopper → frog → snake, the grass stores 10,000 kJ of energy. If about 10 % of the energy passes on at each step, how much energy reaches the snake?

Answer:

[2]

A parasite that kills its host quickly loses its home and its food. What would you expect of most successful parasites?

(not marked)

Visit a grassland or open field near you. Look for its living things and fill in the table with two food chains you find there.

Producer	Primary consumer	Secondary consumer	Tertiary consumer

Which decomposers did you find, and where?

