



Student Name: \_\_\_\_\_

Class: \_\_\_\_\_

Student ID: \_\_\_\_\_

Date: {{DATE}}

## Assessment Details

<b>Duration:</b> 30 minutes	<b>Total Marks:</b> 25
<b>Topics Covered:</b>	<ul style="list-style-type: none"><li>• Definition and Importance of Photosynthesis</li><li>• Reactants and Products of Photosynthesis</li><li>• Role of Light, Water, and Carbon Dioxide in Photosynthesis</li><li>• Importance of Photosynthesis in the Ecosystem</li></ul>

## Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is not permitted.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

**Question 1**

**[1 mark]**

What is the main function of photosynthesis in plants?

A) To make food for humans

B) To produce oxygen for the atmosphere

C) To create energy for plant growth

D) To absorb water and nutrients from the soil

**Question 2**

**[2 marks]**

Describe what photosynthesis is. (Maximum 50 words)

**Question 3**

**[2 marks]**

Label the basic components of a plant cell involved in photosynthesis (e.g., chloroplast, nucleus, cell wall).

**Question 4**

**[1 mark]**

What are the reactants of photosynthesis?

A) Water, carbon dioxide, and sunlight

B) Oxygen, glucose, and chlorophyll

C) Nitrogen, phosphorus, and potassium

D) Soil, water, and air

**Question 5**

**[3 marks]**

Explain the role of light in photosynthesis. (Maximum 100 words)

**Question 6**

**[3 marks]**

Identify and label the products of photosynthesis in a simple equation.

**Question 7**

**[1 mark]**

How do other organisms, such as algae and cyanobacteria, contribute to photosynthesis?

A) They absorb carbon dioxide and release oxygen

B) They produce glucose and release water

C) They contribute to the water cycle

D) They enhance soil quality

**Question 8**

**[5 marks]**

Discuss the importance of photosynthesis in the ecosystem. (Maximum 150 words)

**Question 9**

**[5 marks]**

Create a simple food web illustrating the relationship between organisms that undergo photosynthesis and those that do not.

The marking guide and feedback for this assessment can be found on the following pages.



