**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ADM NO: \_\_\_\_\_\_\_\_\_\_\_\_CLASS:\_\_\_\_\_\_\_\_\_\_**

**DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SIGN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

MARKS HERE

**BIOLOGY FORM 1**

**TERM 3, 2023**

**INSTRUCTIONS: Answer all questions in the spaces provided (50Marks) TIME: 1HOUR**

1. (a) Define the term ‘photosynthesis’. (1 mark)

(b) State four requirements for the process of photosynthesis. (4 marks)

**2.** Name the branch of biology that deals with the study of: (3 marks)

1. Cells
2. Parasites
3. Viruses

**3**. The diagram below shows an experiment that was set up to investigate a certain process.



 The set-up was left in bright sunlight for several hours.

1. State the aim of the experiment. (1 mark)
2. Name X and Y. (2 marks)
3. Other than sunlight, name three other factors that would affect the experiment. (3 marks)

 (d) State how the identity of X would be confirmed. (1 mark)

(e) Write a chemical equation for this process. (3 marks)

**4.** Draw a well labelled diagram of a simple leaf (5mks)

5. Tabulate the differences between plant and animal cells. (4 marks)

**6**. The diagram alongside was drawn by a student after observing a human cheek cell under a microscope.



(a) Suggest the type of microscope the student used. Give a reason. (2 marks)

 (b) Name the parts labelled A, B and C. (3 marks)

 (c) State the functions of parts A, B and C. (3 marks)

 (d) State two features which make this cell different from a plant cell. (2 marks)

**7**. Differentiate between haemolysis and crenation (2marks)

8. Define the term species (1mark)

9. State the functions of the following parts of a microscope (2marks)

a) Condenser

b) Diaphragm

10. List four factors affecting diffusion (4marks)

11. Name the apparatus used for trapping crawling organisms (1mark)

12. A student counted 20 cells across a field of view whose diameter was 3mm. Calculate the size of one cell in micrometers (3marks)