| NA       | AMECOMB   |
|----------|---|
|          | NAKWAYA SECONDARY SCHOOL  |
|          | TERM I ASSESSMENTS 2025   |
|          | S.5 BIOLOGY TEST 2  |
|          | Paper 1 (theory)  |
|          | 2 Hours   |
| IN       | STRUCTIONS  Answer all items in section <b>A</b> and <b>B</b> .   |
| •        | For section <b>A</b> , write your responses in the spaces provides. For section <b>B</b> , write your responses on the answer sheet provided.   |
|          | SECTION A   |
| Up<br>He | m 1 on observation of a bacterium cell, Paul a S.5 student realised that the cell lacks organelles. 's aware that the cell needs ATP energy for locomotion since it has a flagellum. Paul is also sed about all bacteria; he says that they cause diseases. |
| a)       | Which organelles was Paul meaning?  |
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|          |   |
|          |   |
|          |   |
|          |   |
| b)       | Help Paul to know why bacterium cell uses energy yet no organelles present?   |
|          |   |
|          |   |
|          |   |
| c)       | Is Paul right to hate all bacteria? Suggest reasons for your response.  |
|          |   |
|          |   |
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|          |   |

| Ite | em 2  |
|-----|---|
| ch  | here is a common statement amongst our community that "Water is life". Indeed, water is a emical of life. As an advanced biology student; suggest why do you think people say water is life |
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| b)  | Draw a water molecule structure to show the property that makes it an important chemical or   |

life.

## Item 3

Musisi was carrying out an investigation to find out the different animal cells that form different tissues. He gently scratched his mouth with a toothpick, put on a slide and observed under a light microscope.

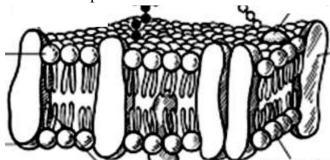
| a) | Using histological knowledge which; (i) type of tissue did he observe under the microscope? |
|----|---|
|    | (ii) other body regions contain the tissue that Musisi observed?                            |
|    |   |
|    |   |
| b) | (i) What is the role of the tissue observed in the region where they are found?             |
|    |   |
|    |   |
|    | (ii) How is the tissue suited to play the role(s) you have stated in h(i) shove?            |
|    | (ii) How is the tissue suited to play the role(s) you have stated in b(i) above?            |
|    |   |
|    |   |
|    |   |
|    |   |
|    |   |

c) Draw and label what Musisi observed in the microscope.

## **SECTION B**

## Item 4

While on her study research about cells using sophisticated microscopic techniques, Leticia always observed the structure below surrounding cytoplasm and other contents. She failed to explain this to her supervisors.



As an advanced biology student how would you explain to the supervisors, assuming you were Leticia?