

NAMESIGN.....



AITEL EXAMINATION BOARD
PRE-REGISTRATION ASSESSMENT 2024
SENIOR FOUR
BIOLOGY
TIME 2 HOURS

Instructions

Attempt all questions in this paper

Question 1

At the end of 2022, Uganda reported that hepatitis had killed 1250 people, Ebola-1590 and 5200 due to AIDS. The report explained the cause of each disease and its effect on different human body organs and systems. Extremely high infection rates of cassava crops by leaf mosaic disease were also reported. For each disease, Ugandans were sensitized on symptoms and mode of transmission but did not include prevention measures. Write the key information on each disease based on the report and suggest possible measures of prevention. **(20 scores)**

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Question 3


In the body, different processes need energy to run smoothly, these directly or indirectly require oxygen. As different organisms take up gases easily from the environment through their body surfaces, man is unique that has developed a respiratory system. This system has enabled human beings to take in air from the environment and with its subsequent carriage to body cells.

- a) Explain why man developed the respiratory system. **(05 scores)**
b) State how gases can be carried to body cells from the environment. **(15 scores)**

[illegible]

Question 4

Some slum areas have children that look weak, pale and were quite inactive as shown below. They rarely play or run around like other children of their age because on addition to lack of energy, some of the children have crippled bodies and so big. The school through the biology teacher and school doctor, intend to organize a medical camp for the slum children. The medical camp is aimed at discussing the cause of the above cases in children, the likely effects in case the challenges were not addressed and possible solutions to the above cases in children. The school is to purchase some food materials for the children as well. The biology teacher approaches you to prepare a speech to the slum children.

A photograph showing a group of children in a slum. The children appear malnourished, with some showing signs of physical deformities. They are standing close together, and the background shows a simple, possibly dilapidated building. The image is used to illustrate the health issues mentioned in the text.

- a) As an S.3 student, use the knowledge of nutrient compound advise the school on what they should purchase for the children. *(10 scores)*
- b) Write a speech that shall help the slum children to restore their normal life. *(10 scores)*

[illegible]

Question 5

Two students of S.3 were touring their school banana plantation with much weeds. Each of them uprooted these plants and argued as to whether they are either monocots or dicots.



Banana plant



A weed

- a) As a friend to both, how would you help them settle their argument? **(07 scores)**
- b) Explain to them how the different plant organs on both plants are modified to carry out the different functions. **(13 scores)**

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

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