P530/2
BIOLOGY
Paper 2
SEPTEMBER, 2023
21/2 Hours



## ST. JULIAN HIGH SCHOOL SEETA CAMPUS Uganda Advanced Certificate of Education BEGINNING OF TERM III EXAMINATIONS 2023

## **INSTRUCTIONS**

- ✓ Answer only 4 questions in this paper.
- ✓ Answers should be written to provided booklet/answer sheets.
- ✓ Ensure good handwriting is used and no crowding of answers
- ✓ All questions carry equal marks.
- ✓ Begin each number on a new page.

## For Examiner's Use only.

SECTION	MARKS
SECTION A	
SECTION B	
TOTAL	
GRADE	
TR'S COMMENT	

- 1. (a) Describe the structure of DNA molecule.
  - (b) Compare DNA and RNA
- 2. (a) What is meant by term ecosystem
  - (b) Describe the energy flow in an ecosystem.
  - (c) Explain two types of competitions in organisms within an ecosystem.
- 3. (a) Briefly explain 4 ways in which substances move in and out of the cell
  - (b) How is osmosis significant to living organisms?
  - (c) Mention two evidences to show that active transport occurs with the need of energy.
- 4. (a) Describe the nervous and hormonal control of digestion of food in the alimentary canal
  - (b) Explain the importance of the secretions of the gastric glands.
- 5. (a) Distinguish between ventilation mechanisms and gaseous exchange.
  - (b) Describe the mechanism of gaseous exchange in protozoan like amoeba.
  - (c) How is a toad adapted to carry out gaseous exchange?
- 6. (a) Define the terms below.
  - (i) Histology
  - (ii) Tissue
  - (iii) Cell differentiation

(04 marks)

(b) Give an outline of the simple tissues in animals

(02 marks)

(c) What is the importance of the parenchyma cells in plants?

(07 marks)

**END** 

The possibility of excelling in Biology is determined by how much you practice it