

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF CERTIFICATE IN**

**BIOL 00100: BOTANY AND ZOOLOGY**

**STREAMS: CERT.**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 23/09/2021**

**5.00 P.M – 7.00 P.M.**

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**INSTRUCTIONS:**

**SECTION A: ANSWER ALL QUESTIONS (30 MARKS)**

1. a) Differentiate between dominant and recessive genes (2 marks)  
b) State four taxa used in classification (2 marks)  
c) Outline two principles of Binomial nomenclature (2 marks)
2. a) State the stages of order of plant reproduction (2 marks)  
b) Differentiate between mitosis and meiosis with diagrams (4 marks)
3. Elaborate stages of plant growth (6 marks)
4. a) Describe a plant based on level of organization (5 marks)  
b) State the function of ribosomes (1 mark)
5. a) Differentiate between botany and zoology (2 marks)  
b) Elaborate on plant tissues (4 marks)

**SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)**

6. Write extensively on Kingdom Protista (20 marks)
7. a) Based on Mendelian genetics, produce F<sub>2</sub> using TT for dominant. (10 marks)

b) Write on Kingdom Fungi based on genes and tt for recessive genes;

i) Classification (5 marks)

ii) Reproduction (5 marks)

8. Draw a well labelled diagram of animal cell with functions of each organelle

(20 marks)

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