

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF

BOTA 271: PLANT PHYSIOLOGY

STREAMS:

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 11/08/2021

11.30 A.M – 1.30 P.M.

1. Explain why water is important for growth of plants (4 marks)
2. a. draw a well labeled diagram of the chloroplast (5 marks)
- b. Name three components that are occur in the cytoplasm (3 marks)
3. a. Describe the basic structures of the following
 - i. Amino acid (3 marks)
 - ii. Fatty acid (3 marks)
4. What is the importance of storage polysaccharides in plants (4 marks)
5. Expound on the difference between fats and oils (4 marks)
6. Describe the classification of enzymes (4 marks)

SECTION 2

Answer any two questions (40 marks)

7. a. Discuss the path that water and solutes follow during absorption from soil to different parts of the plant (10 marks)

- b. Discuss mineral nutrition in plants (10 marks)
8. Discuss the role of hormones in plant growth and development (20 marks)
9. a. Discuss the process of photosynthesis in plants (10 marks)
- b. Discuss the process of respiration in plants (10 marks)
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