

CHUKA



UNIVERSITY

**SUPPLEMENTARY / SPECIAL EXAMINATIONS**

**FOURTH YEAR EXAMINATION FOR THE AWARD OF BACHELOR DEGREE IN**

**BOTA 473 : PLANT BIOCHEMISTRY**

**STREAMS: BSc. BIO, BEd. SCI**

**TIME: 2**

**HOURS**

**DAY/DATE: TUESDAY 17/11/2020**

**11.30 A.M - 1.30 P.M.**

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**INSTRUCTIONS:**

- Answer all questions in section A and any two in section B

**Section A**

1. Describe roles of polysaccharides in plants (5 marks)
2. Name three plant of alkaloids (3 marks)
3. Describe the structures of the following
  - a) Sucrose 3 marks
  - b) Amylose (3 marks)
4. Describe plant natural products (4 marks)
5. Describe the classes of organisms that are involved in nitrogen fixing (4 marks)
6. Describe the types of lipids found in plants (4 marks)
7. List the classes of amino acids in plants (5 marks)
8. Describe the functions of lipids in plants. (4 marks)

**Section B**

9. Discuss the synthesis proteins in plants. (20 marks)

10. Discuss the process of photosynthesis in plants (20 marks)

11. Discuss the production of natural compounds in plants (20 marks)

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