

"Investing in Africa's future"

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

NAAS 211: AGRICULTURAL BIOCHEMISTRY

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2022

LECTURER: DR. S. CHAKEREDZA

DURATION: 3 HOURS

INSTRUCTION

- 1. Answer All Questions in Section A, and
- 2. Answer Any three Questions from Section B

Section A (answer all, possible marks 40) 1. Draw a labelled animal cell. [5] 2. Draw a labelled plant cell. [5] 3. Compare and contrast the plant and the animal cell. [8] 4. Give the nutrients that are required for appropriate cell function. [8] 5. List the roles of individual nutrients in an animal. [8] 6. Give examples of each nutrient in question 5 above [6] Section B (Choose any 3 questions, maximum possible marks 60) 1. Write an essay on enzyme activity and enzyme inhibition. [20] 2. Describe photosynthesis, its role and importance. [20] 3. Discuss and show how glyceraldehyde is central to metabolic pathways. [20] 4. ATP is central to metabolism in living organisms. Show the steps in glycolysis where it is formed. [20] 5. Describe and show in glycolysis the stages where ATP is used and where it is

END OF EXAMINATION PAPER

[20]

produced.