



“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. What is a polymer? [5]
2. What is a monomer? [5]
3. What is a chiral carbon? [8]
4. List three methods of classifying carbohydrates. [8]
5. Giving examples distinguish between alpha and beta carbohydrates. [8]
6. Give examples of compounds with D/L stereochemistry. [6]

Section B (Choose any 3, 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 Krebs cycle where it is formed
[20]
5. Describe and show in Krebs cycle the stages where ATP is used and where it is produced. [20]

END OF EXAMINATION PAPER