

The Open University of Sri Lanka
Faculty of Engineering Technology



Department of Agricultural and Plantation Engineering

Study Programme : Bachelor of Industrial Studies Honours
(Agriculture)

Name of the Examination: Final Examination

Course Code and Title : AGI3551 Agricultural Biology

Academic Year : 2022/2023

Date : 21st February 2024

Time : 13.30 - 16.30 hrs

Index No. _____

SECTION 2: Answer any four (04) questions.

1. a. "The cell membrane/plasma membrane/cytoplasm membrane is essential for most of the cell functions" Comment on the statement (10 marks).
b. "Chloroplasts are plant cell organelles that convert light energy into relatively stable chemical energy". Explain the structural adaptations of the chloroplast for its function (15 marks).
2. Write short notes on following,
 - a. Gene linkage and genetic expression (10 marks)
 - b. Typical characteristics of sex-linked inheritances (15 marks)
3. "Chromosomal Mutations occur due to changes in the structure of individual chromosomes or their number". Discuss the given statement (25 marks).
4. "The journey from gene to protein is complex with several steps and tightly controlled within each cell". Explain the statement (25 marks).
5. Explain the conditions necessary for photosynthesis (25 marks).
6. Explain the factors affecting fruit quality (25 marks).