



UNIVERSITY EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN AGRICULTURE
SECOND SEMESTER 2024/2025
[JANUARY – APRIL, 2025]**

AGRO 411: POST HARVEST TECHNOLOGY OF FIELD CROPS

STREAM: Y4 S2

TIME: 2 HOURS

DAY: TUESDAY, 9:00 - 11:00 A.M.

DATE: 22/04/2025

INSTRUCTIONS:

- 1. Do not write anything on this question paper.**
- 2. Answer question ONE (Compulsory) and any other TWO questions.**

QUESTION ONE (COMPULSORY) (30 MARKS)

- Describe the main storage methods for the cereals. (2 marks)
- Describe the term *physiological maturity*. (2 marks)
- Explain the term *harvest index* as used in post-harvest management of crops. (2 marks)
- Grains should be dried to a moisture content of 10-13%. Discuss. (3 marks)
- Describe the plant disease triangle. (4 marks)
- Discuss activities involved in primary processing of field crops. (4 marks)
- Discuss factors that affect maturity of crop plants. (4 marks)
- Discuss chemical indices of maturity. (4 marks)
- Discuss the environmental factors that contribute to postharvest losses. (5 marks)

QUESTION TWO (20 MARKS)

- Why is it necessary to process harvested crop products? (10 marks)
- Discuss the edaphic factors that influence field crops yield. (10 marks)

QUESTION THREE (20 MARKS)

- (a) Discuss management practices that can be implemented to disrupt disease built-up in stored crops. (10 marks)
- (b) Discuss the climacteric and non-climacteric fruit ripening. (10 marks)

QUESTION FOUR (20 MARKS)

- (a) Discuss the main storage methods used by the farmers for cereals. (10 marks)
- (b) Discuss the maturity indices used in fruits and vegetables. (10 marks)