



GWANDA STATE UNIVERSITY
FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE
DEPARTMENT OF HORTICULTURE AND CROP PRODUCTION
BACHELOR OF SCIENCE (HONOURS) DEGREE IN CROP SCIENCE
LCS 4115 CROP PRODUCT PROCESSING
FIRST SEMESTER EXAMINATION
SEPTEMBER 2024

This examination paper consists of 2 pages

Time Allowed: 3 hours
Total Marks: 100
Special Requirements: None
Examiner's Name: Mr J. Dube

INSTRUCTIONS

- 1 Answer **all** questions in Section A
- 2 Answer **three** questions in Section B

MARK ALLOCATION

QUESTION	MARKS
SECTION A	40
SECTION B	60
TOTAL ATTAINABLE MARKS	100

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SECTION A: ANSWER ALL QUESTIONS IN SECTION A

1. Elaborate on the following terms as used in crop product processing:
 - a) Perishable crop products (3)
 - b) Extrusion (3)
 - c) Wet milling (3)
 - d) Storage pathology (3)
 - e) Flavour changes (2)
2. Discuss the role of crop product processing and preservation. (16)
3. Describe procedures in wheat milling (10)

SECTION B: ANSWER THREE QUESTIONS IN SECTION B

4. a) Briefly describe blanching in vegetables and its benefits (10)
- b) Discuss any two techniques used in cereal grain fortification citing advantages of each approach (10)
5. Discuss factors that contribute to postharvest losses in fruits and vegetables and suggest ways in which these losses can be minimized (20)
6. Explain the following key crop preservation methods:
 - a) Drying in vegetables (5)
 - b) Preservation by concentration: (5)
 - c) Preservation with sugar (5)
 - d) Cooling (5)
7. With the help a flow chart, describe the procedures involved sugar cane processing (20)

END OF EXAMINATION PAPER