



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF CROP AND SOIL SCIENCES

EXAMINATION: FIRST SEMESTER POP EXAMINATION APRIL 2019_1

COURSE TITLE: HARVESTING, PROCESSING AND STORAGE OF CROPS

COURSE CODE: CRP310

TOTAL SCORE: 70 MARKS

TIME ALLOWED: 3 hours

INSTRUCTION: Answer compulsory question 1 (30marks) and any four questions (10 marks each)

Q1

- a. Attempt to categorise fruit into groups with two examples each. (8marks)
- b. list three physical and chemical indices of crop maturity (7marks)
- c. State the maturity standards of the followings; tomato, okra, cabbage, watermelon, carrot, cowpea and sweet corn. (7marks)
- d. Give two examples of each of the followings:
 - i. Chemicals that delays ripening
 - ii. Chemicals that hasten ripening
 - iii. Climacteric fruits
 - iv. Non- climacteric fruits (8marks)

Q2

- a. Differentiate between physiological maturity from harvest maturity (5marks)
- b. List the three stages of maturity in the life span of a plant. (5marks)

Q3

- a. State five factors affecting the ripening of fruits and vegetables (5marks)
- b. Define harvesting and List three methods of harvesting. (5marks)

Q4

- a. List the factors to be considered before harvesting can commence? (5marks)
- b. Describe the advantages of manual and mechanical harvesting. (5marks)

Q5

- a. List the optimum temperature and humidity for the storage of grains. (3marks)
- b. Highlight the two factors that determine the choice for the best storage of crops (3marks)
- c. State the four methods of temporary storage of cereals and pulses. (4marks)

Q6

- a. Describe three technical methods of reducing crop deterioration. (6marks)
- b. List four factors that affect the rate and total drying time of crop products. (4marks)

Q7

- a. Enumerate three advantages of blanching. (6marks)
- b. Outline the four principles of combined preservation procedures. (4marks)