



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

EXAMINATION: 2020-1 POP EXAMINATION

COURSE TITLE: PERMANENT CROP PRODUCTION

COURSE CODE: CRP313

TOTAL SCORE: 70 MARKS

TIME ALLOWED: 3 hours

INSTRUCTION: Answer compulsory question 1 (25marks) and any THREE questions (15 marks each)

Question 1 COCOA

- a) Write a short descriptive note on the botany/morphology of cocoa
- b) Describe the field establishment of cocoa.
- c) List any five-insect pest of cocoa.
- d) Describe the harvesting and processing of cocoa. (25 marks)

QUESTION 2 COFFEE

- a) Write a short note on the field establishment of Coffee. (4 marks)
- b) List any five-insect pest Coffee of cocoa. (3 marks)
- c) Describe the harvesting and processing of Coffee. (8 marks)

QUESTION 3 KOLA NUT

- a) Write a short note on the field establishment of kola nut (5 marks)
- b) List any five-insect pest of kola nut . (5 marks)
- c) Describe the processing and storage of cola nut. (5 marks)

QUESTION 4 Oil palm)

- a)
 - i) Name the research institute have the mandate of improving oil palm and (2 mark)
 - ii) explain the success recorded in their crop improvement programme (3 marks)
- b). List any 3 diseases of oil palm (3marks)
- c) Describe the harvesting and processing of oil palm. (7 marks)

Question 5

- a) Briefly describe the vegetative propagation of rubber (6 Marks)
- b) List any 5 pests of rubber plant (5 marks)
- c) Briefly describe the environmental conditions that determines the yield of latex. (4 marks)

Question 6

- a) List five general Climatic Conditions of significant importance to a plantation farmer (5 marks)
- b) List five general soil factors Conditions of significant importance to a plantation farmer (5 marks)
- c)
 - i) List any three methods of fertilizer application on permanent tree field (2 marks)
 - (ii) List six types of fertilizer used on permanent crops (3 marks)