



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

EXAMINATION: 2021_1 POP EXAMINATION

COURSE TITLE: PLANT GROWTH AND DEVELOPMENT (2CU)

COURSE CODE: CRP 502

TOTAL SCORE: 70 MARKS

2021 EXAMINATION

INSTRUCTION: Answer *THREE* Questions in all.

Question 1 is compulsory (30marks) and any TWO Questions (20 marks each)

TIME ALLOWED: 2hours

Q1

- (a) (i) List the external factors that influence seed germination (3 marks)
- (ii) Explain the importance of water in seed germination (7 marks)
- (b)(i) In what form is Boron available to plants (3 marks)
- (ii) State the deficiency symptoms of Boron in plants (7 marks)
- (c) In an intercrop experiment involving rice and groundnut, mention the yield components that the researcher is mostly interested in (10 marks)

Q2

- (a) Explain the principle of respiration in plants (5 marks)
- (b) List the factors influencing respiration in plants (10 marks)
- (c) What role does temperature play in respiration (5 marks)

Q3

Discuss in detail the environmental factors that affect Induction and Differentiation in plants (20 marks)

Q4

State clearly with the aid of a formula what Photosynthesis is (20 marks)