



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

EXAMINATION: 2021_1 POP EXAMINATION

COURSE TITLE: PRINCIPLES OF IRRIGATION AND DRAINAGE (2CU)

COURSE CODE: CRP 306

TOTAL SCORE: 70 MARKS

INSTRUCTION: *Answer three Questions in All. Question 1 is compulsory (30marks) and any two questions (20 marks each)*

TIME ALLOWED: 2hours

QUESTION

Q1

- What is the meaning of Irrigation? State 5 importance of Irrigation. (10marks)
- State two ways in which radiation influences the rate of transpiration. (6marks)
- Briefly explain the role of plant in the soil-plant –atmosphere relationship. (14marks)

Q2

- Briefly discuss the critical growth stage of crops and highlight the stages of growth affected by irrigation. (10marks)
- With the aid of table, state the critical growth stages Growth of the following crops; sorghum, wheat, Maize, Cotton and bean. (10marks)

Q3

- Classify 5 crops based on crop water requirement with two examples each. (15marks)
- State the two types of irrigation requirement. (5marks)

Q4

- State 2 types of application and transportation losses. (3marks)
- Explain the term consumptive use and state and describe the three (3) types of consumptive use. (17marks)