



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**SCHOOL OF AGRICULTURAL SCIENCES**

**COURSE CODE:CRP 306**

**COURSE TITLE: PRINCIPLES OF IRRIGATION AND DRAINAGE**

**INSTRUCTIONS: ANSWER FOUR (4) QUESTIONS. QUESTION 1 IS  
COMPULSORY AND ANY OTHER THREE (3) QUESTIONS**

**Time Allowed: 2 Hours**

**QUESTIONS**

- 1a. Define irrigation (5marks)
- b. Mention five (5) Purposes of irrigation
- c. Write five (5) Importance of irrigation
- d. Describe two (2) Forms of irrigation
- 2a. Describe the process of transpiration
- 2b. List three (3) factors that affect the water requirement of crops and give two (2) examples of mesophytes
- 3a. What does irrigation requirement (IR) of a crop mean?
- 3b. Explain two Types of irrigation requirement stating their equations and full meaning
- 4a. Define Irrigation scheduling.

4b. State three (3) benefits of proper irrigation scheduling?

4c. Mention methods used in determining irrigation scheduling and discuss any one

5a. Explain the following?

I Irrigation during the vegetative stage of growth

II Irrigation during the flowering stage of growth

III Irrigation during fruiting stage of growth

6a. State four (3) roles of water in crop growth

6b. Discuss Tomato and Cabbage crops under these headings:

i. Varieties

ii. Climate

iii. Planting time

iv. Family