



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
KM 4 Kaduna - Zaria Expressway Riga Chikun Kaduna

POP EXAMINATION 2022_2

DEPARTMENT OF CROP AND SOIL SCIENCES

COURSE CODE: CRP 302

COURSE TITLE: CROP PHYSIOLOGY AND TAXONOMY

TOTAL CREDIT UNIT: 2 CU

TIME: 2 HRS

Instruction: Answer Three Questions in all, including Question One which is Compulsory

Question One

a). With the aid of a sketched diagram give a descriptions and functions of any five of the plant cell organelle.

b) Briefly discuss Crop Physiology base on the following headings;

- i). Meanings
- ii). importance
- c). Explain the meaning of diffusion and osmosis
- d). Discuss diffusion as means of transport in plants
- e). List all types of diffusion in plants
- f). Outline the importance of diffusion in plants
- g). Explain how osmosis affects cells
- h). Give examples of osmosis

Question Two

- a). Explain the meaning of water potentials
- b). Outline and discuss the components of water potentials
- c). State the importance of water potentials in crop physiology

Question Three

- a). Explain the mechanism of water uptake in the plants
- b). Discuss the transportation movement of stream in plants
- c). List and explain the various methods of measuring water status

Question four

- a). Explain the meaning and definition of photosynthesis
- b). Discuss the definition of absorption and action light spectrum
- c). Give meaning of photochemical reaction