

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

2024 1 EXAMINATION

COURSE TITLE: AGRO CLIMATOLOGY AND BIOGEOGRAPHY (2 CU)

COURSE CODE: AGR 309 TOTAL SCORE: 70 MARKS

INSTRUCTION: Answer 3 questions in all

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

TIME ALLOWED: 2 1/2 Hours

a. Certain aims are associated with biogeography. Exhaustively discuss these aims.

b. Discuss the following factors controlling weather and climate:

bi. Distribution of land and sea bii. Prevailing winds and the location of the main pressure centre.

 c. Define weather and climate. (10 marks)

a. Explain the long wave energy in the atmosphere. (10 marks)

b. Outline the five major air masses which affect a location at various times of the year.

(10 marks)

3. a. Analyze the changes that occur in air pressure during the summer season. (10 marks)

b. Discuss the following types of precipitation:

bi. Snow. bii. Hailstone. biii. Acid rain.

(10 marks)

4.a. State any five policy principles of mitigation and adaptation to climate change as suggested by Travis Lybbert and Daniel Suminer. (10 marks)

 Enumerate five factors that affect evapo-transpiration. (10 marks)