



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF SOCIAL SCIENCES

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF EDUCATION (ARTS)

BACHELOR OF ARTS

AGE 301: PHYSICAL GEOGRAPHY 111

DATE: 24/7/2019

TIME: 2.00-4.00 PM

INSTRUCTIONS:

ANSWERS QUESTION ONE AND ANY OTHER TWO QUESTIONS; AT LEAST ONE QUESTION FROM EACH SECTION.

SECTION A: COMPULSORY

- a) Describe the spatial and temporal variations of biotic factors (8 marks)
- b) Discuss three biotic processes that determine the overall distribution of species (6 marks)
- c) Describe two types of genetic climatic classification scheme (8 marks)
- d) Explain the following concepts:
 - i. Micro-climate (3 marks)
 - ii. Man-made climates (2 marks)
 - iii. Global warming (3 marks)

SECTION B: ATMOSPHERE

QUESTION TWO (20 MARKS)

Examine the factors that influence the horizontal distribution of temperature (20 marks)

QUESTION THREE (20 MARKS)

- a) Explain the classification of air masses (8 marks)
- b) Evaluate the effects of air masses in controlling climate (8 marks)
- c) Explain the problems of classifying climates (4 marks)

SECTION C: BIOSPHERE

QUESTION FOUR (20 MARKS)

- a) Explain the concept of energy flow in an ecosystem (8 marks)
- b) Discuss any three factors that determine the distribution of living organism (12 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the structure and composition of a Savana grassland (6 marks)
- b) Assess the effects of human pressure on water and forests ecosystems (14 marks)