

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

IGEMBE CAMPUS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF
EDUCATION (ARTS)

GEO 302: METEOROLOGY AND CLIMATOLOGY

STREAMS: B.Ed (ARTS) Y3S2 (SB)

TIME: 2 HOURS

DAY/DATE: TUESDAY 5/12/2017

2.30 P.M - 4.30 P.M

INSTRUCTIONS:

- Answer Question ONE and any other TWO

QUESTION ONE

- (a) Define the following terms; [10 Marks]
- (i) Climatology
 - (ii) Micro climate
 - (iii) Atmosphere
 - (iv) Greenhouse effect
 - (v) Urban heat island
- (b) Examine the causes of global warming and discuss the effects of climate change on human welfare in Kenya. [20 Marks]

QUESTION TWO

- (a) Define the following; [6 Marks]
- (i) Rayleigh scattering
 - (ii) Mie scattering
 - (iii) Non selective scattering
- (b) Discuss the various factors that control temperature distribution over the earth's atmosphere. [14 Marks]

QUESTION THREE

- (a) Discuss causes of microclimate. [12 Marks]
- (b) Discuss the three states of the atmosphere. [8 Marks]

QUESTION FOUR

Examine the types of weather fronts, how they are formed and the weather they bring.

[20 Marks]

QUESTION FIVE

Ice crystal process is one of the processes through which precipitation forms. Discuss how the process occurs.

[20 Marks]

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