



ALUPE UNIVERSITY
COLLEGE

... Bastion of Knowledge...

P. O.Box 845-50400 Busia(K)
principal@auc.ac.ke
Tel: +254 741 217 185
+254 736 044 469
off Busia-Malaba road

OFFICE OF THE DEPUTY PRINCIPAL
ACADEMICS, RESEARCH AND STUDENT AFFAIRS

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER REGULAR MAIN
EXAMINATION

**FOR THE DEGREE OF BACHELOR OF
EDUCATION (ARTS)**

COURSE CODE: GEO 110

**COURSE TITLE: THE EARTH'S PHYSICAL
ENVIRONMENTS**

DATE: 23RD FEBRUARY, 2021

TIME: 2.00PM – 5.00PM

INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

GEO 110: THE EARTH'S PHYSICAL ENVIRONMENTS

STREAM: BED (Arts)

DURATION: 3 Hours

INSTRUCTIONS TO CANDIDATES

- i. Answer Question **ONE** any other **TWO** Questions.
- ii. Maps, sketches and diagrams should be used whenever they serve to illustrate the answer.
- iii. Do not write on the question paper

Question one

- a) Define the following terms as used in the study of the universe (5 Marks)
 - i. Andromeda
 - ii. Galaxy
 - iii. Milky Way
 - iv. Asteroids
 - v. Planetoids
- b) Explain importance of life layer of concern to geographers (5 Marks)
- c) Giving examples differentiate between endogenic and exogenic land forming processes (5 Marks)
- d)
 - i. State parameters used to categorize layers of atmosphere (3 Marks)
 - ii. Why is atmospheric layer above 80 km from the lithosphere described as heterogeneous layer (2 Marks)
- e)
 - i. Name three types of atmospheric short wavelengths (3 Marks)
 - ii. Give two factors altering local energy balance in atmosphere (2 Marks)
- f)
 - i. Explain the scope of climatology as branch of geography (2 Marks)

- ii. Identify the major contribution of the following scholars to the study of climatology (3 Marks)

Alexander Von Humboldt in 1817

Galileo 1593

Torricelli 1643

Question Two

- a) Explain evidences advanced by geologists to support existence of primordial continent called Pangea (14 Marks)
- b) Describe mechanisms by which crustal rocks move (6 Marks)

Question Three

- a) Giving examples, describe formation of sedimentary rocks under the following (15 Marks)
 - i. Detrital sediments
 - ii. Chemical sediments
 - iii. Organic sediments
- b) Identify five limitations of isotopic techniques for dating crustal rocks (5 Marks)

Question Four

- a) Explain major causes of atmospheric circulation (12 Marks)
- b) Describe the occurrence of the following types of rainfall (8 Marks)
 - i. Convectonal rainfall
 - ii. Orographic rainfall

Question Five

- a) Using illustrations, explain five human induced causes of global warming (10 Marks)
- b) Discuss how geologists employ seismic waves and meteorites to gather information about internal structure of the earth (10 Marks)
