



GARISSA UNIVERSITY

UNIVERSITY EXAMINATION **2017/2018** ACADEMIC YEAR **TWO**
FIRST SEMESTER EXAMINATION

SCHOOL OF EDUCATION, ARTS AND SOCIAL SCIENCES

FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)

COURSE CODE: GEO 210

COURSE TITLE: INTRODUCTION TO CARTOGRAPHY

EXAMINATION DURATION: 3 HOURS

DATE: 05/12/17

TIME: 2.00-5.00 PM

INSTRUCTION TO CANDIDATES

- The examination has **SIX (6)** questions
- Question **ONE (1)** is **COMPULSORY**
- Choose any other **THREE (3)** questions from the remaining **FIVE (5)** questions
- Use sketch diagrams to illustrate your answer whenever necessary
- Do not carry mobile phones or any other written materials in examination room
- Do not write on this paper

This paper consists of **THREE (3)** printed pages

please turn over



QUESTION ONE (COMPULSORY)

- (a) Study the map of Kakamega 1:50,000 (sheet102/2) provided and answer the following questions:
- Give the general direction of the flow of River Isiukhu. **[2 marks]**
 - Name two methods that have been used to represent the relief in the area covered by the map. **[2 marks]**
 - Calculate the area found on the North Western side of the map enclosed by Mumias - Bungoma Road and river Broderick Falls Road. Give your answers in Hectares **[6 marks]**
 - Give the sheet number of Soy Map. **[1 mark]**
- (b) Using a vertical scale of 1cm represent 200 meters draw a cross-section from Grid reference 01037 to grid reference 01740 **[3 marks]**
- On the cross-section, mark and label the following **[5 marks]**
 - A hill
 - Provincial boundary
 - District boundary
 - Market
 - River Nandamanywa
 - Calculate the vertical exaggeration of the cross-section. (2mks)
- (c) Students from Lukume School set out to carry out field work in the area of Kakamega
- With evidence, name two crops they found growing in the area **[2 marks]**
 - State any two difficulties encountered when interpreting human and physical features shown on a map. **[4 marks]**

QUESTION TWO

- (a) Outline the historical development of cartography through the different eras **[8 marks]**
- (b) Using examples describe the four types of spatial data used in cartography. **[7 marks]**

QUESTION THREE

- (a) Discuss any two coordinate systems of locating points on a map. **[6 marks]**
- (b) Describe the three types of North's shown on a map. **[6 marks]**
- (c) Outline three elements of a map. **[3 marks]**



QUESTION FOUR

- (a) Using examples differentiate between small scale and large scale maps. **[6 marks]**
- (b) Define the following terms as used in cartography. **[6 marks]**
- i. Scale
 - ii. Symbiology
 - iii. Maps Compilation
- (c) Outline any four features of base maps. **[4 marks]**

QUESTION FIVE

Describe any three types of map projections based on surface projection. **[15 marks]**

QUESTION SIX

- (a) Describe any four kinds of measurement scale used in thematic mapping. **[8 marks]**
- (b) Describe how to identify relief from a topographic map. **[7 marks]**

