



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157
00200 Nairobi - KENYA
Telephone: 891601-6
Fax: 254-20-891084
E-mail: academics@cuea.edu

MAIN EXAMINATION

AUGUST – DECEMBER 2018 TRIMESTER

FACULTY OF ARTS AND SOCIAL SCIENCES

DEPARTMENT OF HUMANITIES

REGULAR PROGRAMME

GEO 111: CARTOGRAPHY AND MAP ANALYSIS

Date: DECEMBER 2018

Duration: 2 Hours

INSTRUCTIONS: Answer Question ONE and any other TWO Questions

- Q1. a) Discuss steps taken to draw a cross-section/relief. **(6 marks)**
- b) Explain any ways a geographer can identify the direction of flow of a river on a map. **(2 marks)**
- c) Using a diagram distinguish between grid lines and longitude/longitude on a map. **(2 marks)**
- d) Using an illustration, explain how the following would appear on a map. **(5 marks)**
- i) Concave hill.
 - ii) Convex hill.
- e) Express 1cm rep 2.5km as a **ratio** and **linear scale**. **(5 marks)**
- f) Using an illustration explain how to find **6 figure grid reference** and **bearing** of a location on a map. **(5 marks)**
- g) Describe how to calculate the area of the plantation using grid square method. **(5 marks)**
- Q2. a) Discuss the relevance of GIS to a cartographer. **(10 marks)**

- b) Explain how one would use free hand lettering technique to write your name. **(10 marks)**
- Q3. a) Using a diagram examine the difference between a saddle and a pass. **(10 marks)**
- b) Explain the three main types of spatial data represented on a map. **(10 marks)**
- Q4. a) The scale of a map is 1: 50,000 and the map distance from point A to B is 4 cm. The contour units are given as follows, 600 and 1600. Calculate the gradient of the land. **(10 marks)**
- c) Discuss the process of calculating the drainage density. **(10 marks)**
- Q5. Using an illustration of 20cm by 10cm, explain how a map can be reduced by half using grid square method. **(20 marks)**

END