Pwani
University College

A Constituent College of Kenyatta University

UNIVERSITY EXAMINATIONS 2010/2011 ACADEMIC YEAR

1st YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE OF

STREAM: BACHELOR OF EDUCATION (ARTS) AND BACHELOR OF EDUCATION (SCIENCE)

AGE 100: INTRODUCTION TO STATISTICS, CARTOGRAPHY AND MAP ANALYSIS

END SEMESTER 1   TIME: 2 HRS

DAY/TIME: TUESDAY 8.00PM – 11.00PM   DATE: 30.11.2010(LTN)

INSTRUCTIONS:

Answer question **ONE (COMPULSORY)** and any other **TWO** questions.
Use illustrations where necessary

Q.1

a) Describe the general uses of maps to geographers   **(4mks)**

b) State the significance of the bifurcation ratio in drainage basin analysis   **(3mks)**

c) Describe the uses of graphs in network analysis   **(3mks)**

d) Explain why cartography can be described as an art, science and technology   **(6mks)**

e) Describe three methods of map drawing   **(3mks)**

f) Identify two types of statistics   **(2mks)**

g) Explain the significance of sampling in geographic studies   **(6mks)**

h) Differentiate between the measures of central tendency and measures of dispersal. **(3mks)**

Q.2

a.) State the characteristics of the stream ordering system according to Horton 1945 and Strahler 1952. **(5mks)**

b.) Describe the various methods used in the depiction of relief on maps.

(15mks)

Q.3

a.) Evaluate the Nearest Neighbor index in the analysis of settlement patterns **(12mks)**

b.) A settlement scheme measuring 16km by 13km had eight homesteads with distances totaling to 66m. Calculate the Nearest Neighbor index and comment on the results.

(8mks)

Q.4

Discuss the significance of network analysis indices in economic geography. **(20mks)**

Q.5

a.) Explain the historical background of cartography in The Medieval Phase. **(5mks)**

b.) Describe the three scales used in cartography **(5mks)**

c.) Explain significance of the map specifications given to cartographers

(10mks)

Q.6

a.) Discuss the role of statistics in Geographical studies **(7mks)**

b.) Use the following hypothetical data to compute the standard deviation, means, median, mode and the coefficient of variation and comment on the results. **(13mks)**

22, 40, 50, 66, 70, 66, 85, 10, 99, and 99