JARAMOGI OGINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS 2012/2013

1ST YEAR 1ST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF ARTS IN SPATIAL PLANNING

COURSE CODE: EGE 3112

COURSE TITLE: MAP INTERPRETATION AND DESCRIPTIVE STATISTICS

DATE: 1/4/2013 **TIME: 9.00-11.00AM**

DURATION: 2 HOURS

INSTRUCTIONS:

Answer question ONE and any one question from SECTION B and SECTION C

SECTION A

Q1. a) Explain the major classes of maps giving an example of each [5 marks]

b) Use an illustration tolocate the following on a topographical map:

i) Printing note and printers imprint **ii)** Copyright note **iii)**Index to adjoining sheets

iv) Series number**v)** Edition designation [5 marks]

c) Explainand graphically illustrate the conical projection [5 marks]

d) Explain the factors that control drainage pattern [5 marks]

e)Describe the methods for:
i) Determining scale on a topographical map [5 marks]
ii) Determning establishment of settlements [5 marks]

SECTION B

Q2. i) Using an illustration explain the stream order using Strahler's technique [5 marks]

ii) Compute the drainage density of an area 40Km^{2}with a total stream length in the drainagebasinof 60Km^2. [5 marks]

iii) Explain and illustrate the representation of qualitative
a) Point data [5 marks]
b) Aerial data on topographic map sheets . [5 marks]

Q3. i) Discuss the methods used in locating places [10 marks]

ii) illustrate and compute the following:
A compass variation is 40° east, grid north is 4° east of true north; magnetic bearing of λ from ß is 140°.
a) What is the true bearing [5 marks]
b) Grid bearing [5 marks]

SECTION C

Q4. Use the data in the table to answer the following:

1 ***c.i***	**2** ***(f)***
20 - 24	3
25 – 29	7
30 – 34	8
35 – 39	12
40 – 44	9
45 – 49	6
50 – 54	4
55 – 59	1
TOTAL	**50**

i) Compute the mean from the grouped data [5 marks]
ii) Calculate the mean using an assumed mean [5 marks]
iii) Compute the medianfrom the grouped data [5 marks]
iv) Calculate the true mode [5 marks]

Q5. The following table gives the length of life of 400 radio battery cells.

Length of battery life	***No of radio cells (f)***
300 – 399	12
400 – 499	32
500 – 599	64
600 – 699	76
700 – 799	88
800 – 899	60
900 – 999	32
1000 – 1099	26
1100 -1199	10
TOTAL	**400**

i) Calculate the mean deviation [10 marks]
ii) Compute the standard deviation of the length of life of the battaries [10 marks]