JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MANAGEMENT

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF ARTS IN SPATIAL PLANNING

1ST YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR

REGULAR

COURSE CODE: EGE 3112

COURSE TITLE: MAP INTERPRETATION AND DESCRIPTIVE STATISTICS

EXAM VENUE: GIS LAB   STREAM: Spatial Planning)

DATE: 23/04/14   EXAM SESSION: 2.00 – 4.00 PM

TIME: 2.00 HOURS

Instructions:

1. **Answer question 1in section A and ANY other 2 questions in section B**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A

Q1. **a)** Explain the meaning of maps and enumerate two types of maps   [5 marks]

   b) Illustrate the following using a sketch:

i) Index to adjoining sheets ii) Graphical Scale   iii) Neatline and margins iv) Sheet name
v) Information on true, grid and magnetic north   [5 marks]

c) Describe the strengths and weaknesses of using the globe map   [5 marks]

d) Explain the meaning of conical map projection using a neat diagram   [5 marks]

e) Describe the characteristics of a good average   [5 marks]

f) From the following marks obtained by students of a class, calculate the arithmentic mean

Marks	No. Of students
0 -10	5
10-20	10
20-30	25
30-40	30
40-50	20
50-60	10

                    [5 marks]

SECTION B

Q2. a) When neither graphical nor numerical scale is provided on a map describe the methods
one may use to establish the scale.   [10 marks]

   b) Discuss the factors, which control drainage density   [10 marks]

Q3. a) Discuss the representation of qualitative and quantitative point data on maps using neat
      diagrams   [10 marks]

   b) Given the data below, calculate the mean deviation from mean
x: 2, 4, 6, 8, 10, 12,14,16
f: 2, 2, 4, 5,   3,   2, 1, 1   [10 marks]

Q4. a) Describe the factors that determine establishing human settlements [10 marks]

b) Distinguish between descriptive statistics and inferential statistics [5 marks]

c) Explain the meaning of frequency polygon and describe how to construct one

[5 marks]

Q5. a) Use the provided data to compute the standard deviation

Ci	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

[10 marks]

b) Use the data in Question 4 above to answer the following:

    i)   Calculate the mean using an assumed mean [3 marks]

    ii)   Compute the median from the grouped data [4 marks]

    iii)   Calculate true mode [3 marks]

END