JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF SPATIAL PLANNING

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN SPATIAL PLANNING

SEMESTER 2016/2017 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: EGE 3112

COURSE TITLE: MAP INTERPRETATION AND DESCRIPTIVE STATISTICS

EXAM VENUE: **STREAM: SPATIAL PLANNING**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

<u>**Instructions:**</u>

1. **Answer question 1 (compulsory) and ANY other 2 questions.**

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.**

Q1. a) Explain the meaning of maps and describe two major types of maps   [5 marks]
     b) Use a neat sketch to   illustrate the position of the following on a topo sheet:
i) Graphical and numerical scales   [1 mark]
ii) Neat line and margins   [1 mark]
iii) Sheet name   [1 mark]
iv) Information on true, grid and magnetic north   [1 mark]
v) Map net   [1 mark]
c) Describe the advantages and disadvantages of a globe map   [5 marks]
d) Use a sketch to explain the meaning of map projection   [5 marks]
e) Explain the meaning of the term "descriptive statistics"   [5 marks]
f) The following marks were obtained by spatial planning students class, calculate their mean

0- 10	10-20	20-30	30-40	40-50	50-60
5	10	25	30	20	10

                                                                                [5 marks]
Q2. a) Discuss the methods used by planners to establish scale on a map that has none

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

Q3. a) Discuss the methods for representing elevation in topographical map sheets [10 marks]
b) Given the following data, calculate the mean deviation x: 5, 7, 8, 12, 18   [5 marks]
c) Given an array of data below prepare a grouped fequency distribution table

480	372	180	171	171	472	228	496	502	438	188	480	180	175	502	495
496	430	462	408	480	196	188	502	496	435	465	409	480	372	199	480
189	196	502	388	465	408	480	374								

Q4. a) Discuss the factors that influence establishment of human settlements   [10 marks]
b) Use theprovideddatato compute the standard deviation

Ci	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
f	3	7	8	12	9	6	4	1

                                                                                [10 marks]

Q5. a) Discuss four map properties that ensure accuracy in geometric projection   [10 marks]
b) Use the data in Question 4 above to answer the following:
    i)   Calculate the mean using an assumed mean   [5 marks]
    ii)   Find the median from the grouped data   [5 marks]