****

**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**

**Instructions:**

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.**

Q 1a. Use an illustration to describe the stream order using Strahler’s technique [5 marks]

b. Compute the drainage density of an area 40 Km2 with a total stream length in the basin of 60Km2 [5 marks] c. Compare and contrast the use of globe maps in urban planning [5 marks]

d. Caculate the mean, median and true mode from the following data:

 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59. [10 marks]

e. Describe the importatnt elements in urban land use analysis [5 marks]

Q 2a. Using a neat sketch discuss the conical method of map projection [10 marks]

b. With reference to ideal map projection discuss the following properties

1. Conformal [3 marks]
2. Equidistant [3 marks]
3. Orthomorphic [4 marks]

Q 3a. Scales on maps are a pre-requisite. Discuss [10 marks]

 b) Using the following figures calculate the mean deviation and variance

 x:5, 7, 8, 12, 18, [10 marks]

Q 4a. Discuss the techniques employed in relief representation on maps [10 marks]

 b. Describe the factors controlling drainage pattern of a region [10 marks]