



JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

2016/2017

LAND RESOURCE PLANNING AND MANAGEMENT

ECE 2218: ENGINEERING SURVEYING I

CONTINUOUS ASSESSMENT TEST (CAT1)

DATE: 25/04/2017

TIME: 1 HOUR

INSTRUCTIONS

ANSWER ALL QUESTIONS

1. a) Define land surveying and Outline its importance to land resource planning and management (8marks).
b) Write some short notes on the following parts of the Level as applied to levelling (2 marks)
 - i. Leveling head
 - ii. Diaphragm
2. Clearly differentiate between a Theodolite and a Total station (4 marks)
3. Briefly discuss on the different types of levels, stating their main characteristics (6marks).
4. With the aid of a clear diagram briefly outline the differences between Plane and Geodetic survey(5marks)
5. Briefly discuss the following techniques of surveying (5marks)
 - a) Traverse
 - b) Trilateration
 - c) Triangulation
6. Explain the following types of leveling and state where each is used (10marks)
 - i. Reciprocal leveling
 - ii. Fly leveling
 - iii. Differential leveling
 - iv. Simple leveling
 - v. Check leveling.