



UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA

SECOND SEMESTER EXAMINATIONS, MAY 2018

COURSE NO: GM 170

COURSE NAME: SURVEY MEASUREMENTS

CLASS: GM I

TIME: 3 HOURS

Name: _____ Index Number: _____

SECTION A (A Total of 50 Marks is awarded)

Answer all questions in this Section

1. Write on the history of the following: a) the meter and b) the yard. [10 Marks]
2. Write on the total station instruments (electronic tachometers) [5 Marks]
3. Discuss the terms Surveying and Geomatics. [10 Marks]
4. Explain the following: Natural, instrumental and personal errors; and mistakes [12 Marks]
5. Draw and label the theodolite instrument. [5 Marks]
6. How can you measure horizontal and vertical angles in the field? [8 Marks]

SECTION B (A Total of 50 Marks is awarded)

Answer TWO questions in this Section

1. Write on the following GPS techniques: a) static, rapid static, kinematic, and real time kinematic.
b) Write on the procedures for the various techniques in GPS surveys. [25 Marks]
2. Describe in detail how you would use the precise level instruments in the field. [25 Marks]
3. Compare and contrast six rudimentary methods of distance measurements. [25 Marks]

Examiners: Baffoe, P. E./Duncan, E. E.