



(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2016/2017 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR FOUR SEMESTER ONE EXAMINATIONS**

**FOR THE DEGREE OF
BACHELOR OF SCIENCE
(COMPUTER SCIENCE)**

COURSE CODE : CSC 467E

COURSE TITLE : SOFTWARE METRICS

DATE: 19/12/2017

TIME: 8:00 A.M – 10:00 A.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE (COMPULSORY) [30 MARKS]

(a)

- i. With the aid of a diagram describe the term software metrics [4 Marks]
- ii. Distinguish between direct and indirect metrics give examples [6 Marks]
- iii. Describe the terminology function point count [4 Marks]
- iv. Explain ANY **THREE** resources considered when costing software [6 Marks]
- v. Describe **FOUR** Characteristics of software quality [4 Marks]
- vi. Describe Mc cabé's Cyclomatic Complexity Measure [6 Marks]

QUESTION TWO [20 MARKS]

- a) Explain the **FOUR** activities in measurement planning [8 Marks]
- b) Explain ANY **SIX** limitations and constraints software developers should be aware of when implementing a metrics program [12 Marks]

QUESTION THREE [20 MARKS]

Describe the difference between function points and Source line of code [20Marks]

QUESTION FOUR [20 MARKS]

There are five classes of metrics generally used from a commercial perspective to measure the quantity and quality of software. Describe the five classes of those metrics [20 Marks]

QUESTION FIVE [20 Marks]

Describe the software requirement metrics. Give example [20 Marks]