



*(Knowledge for Development)*

**KIBABII UNIVERSITY**

**(KIBU)**

**UNIVERSITY EXAMINATIONS  
2016/2017 ACADEMIC YEAR**

**SPECIAL/SUPPLEMENTARY EXAMINATIONS  
YEAR FOUR SEMESTER TWO EXAMINATIONS**

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

**COURSE CODE : CSC 467E**

**COURSE TITLE : SOFTWARE METRICS**

**DATE: 27/09/2017**

**TIME: 11:30 A.M – 1:30 P.M.**

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**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]