



**ELIZADE UNIVERSITY**

**ILARA-MOKIN**

**FACULTY: BASIC AND APPLIED SCIENCES**  
**DEPARTMENT: MATHEMATICS AND COMPUTER SCIENCE**  
**1<sup>st</sup> SEMESTER EXAMINATION**  
**2017 / 2018 ACADEMIC SESSION**

**COURSE CODE:** CSC 431

**COURSE TITLE:** Computer System Performance Evaluation

**COURSE LEADER:** Dr. Bukola Onyekwelu

**DURATION:** 2 Hours

HOD's SIGNATURE

**INSTRUCTION:**

Candidates should answer any **FOUR** Questions.

Students are warned that possession of any unauthorized materials in an examination is a serious assessment offence

Students are permitted to use **ONLY** a scientific calculator.

1a. Performance Evaluation has seven(7) goals. Describe five (5) of them.

b. Discuss the two(2) techniques of Performance Evaluation

2a. Define the following Performance measures

(i.) Missionability

(iii.) Responsiveness

(v.) Productivity

(ii.) Usage level

(iv.) Dependability

b. Some concepts must first be taken into consideration, before performance measurements can be carried out, what are these concepts?

3a. Performance measurement serves two purposes, name them.

b. Explain the three (3) classes of Performance metrics

4a. Discuss the following:

(i.) Hardware monitors

(ii.) Software monitors

(iii.) Hybrid monitors

b. What are the basic building blocks of a hardware monitor?

5a. Describe the three types of entities involved in the simulation of any system

b. Give reasons why Simulation analysis is a tool to evaluate the performance of any system

c. Draw the diagram showing the Simulation Steps

6a. What is the workload of a system?

b. Draw and explain the State transition diagram for the Markov model of the multiprocessor system

c. Benchmarks are classified into five (5) categories. List them.