



ELIZADE UNIVERSITY

ILARA-MOKIN

FACULTY: BASIC AND APPLIED SCIENCES
DEPARTMENT: MATHEMATICS AND COMPUTER SCIENCE
1st SEMESTER EXAMINATION
2018 / 2019 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. Explain "Performance" in Computer Systems.

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

2a. Discuss the Four(4) techniques of Performance Evaluation

b. What are the major advantages of the analytical modelling over the other techniques?

3a. Give a brief definition of each of the following Performance measures

(i.) Productivity

(iii.) Missionability

(v.) Usage level

(ii.) Responsiveness

(iv.) Dependability

b. Performance measurement serves two purposes. What are they?

4a. What are Monitors?

b. Describe the two types of Monitors based on Trigger Mechanisms.

c. List the basic building blocks of Hardware Monitors, and describe three (3) of them.

5a. A systematic and effective simulation study and analysis involves some steps (phases) to be followed strictly. List these steps.

b. Explain the advantages and disadvantages of Simulation Technique.

c. Draw the diagram of the Overall Simulation Process

6a. Define:

i. Workload of a system

ii. Workload Characterization

iii. Clustering technique

iv. single-parameter histogram

v. Benchmark

b. Draw a block diagram to show the workload characterization process.

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