ELIZADE UNIVERSITY

ILARA-MOKIN

FACULTY: BASIC AND APPLIED SCIENCES
DEPARTMENT: MATHEMATICS AND COMPUTER SCIENCE
1st **SEMESTER EXAMINATION**
2018 / 2019 **ACADEMIC SESSION**

COURSE CODE: CSC 203

COURSE TITLE: Operating Systems

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. What is the major difference between the Disc Operating System (DOS) and the Windows Operation System?

b. _____ was designed from its origin as a single-user, single-tasking operating system.

c. Operating systems can be classified/categorized based on different conditions and perspectives. List two perspectives, and the types under each perspective.

2a. Explain the Components of the Operating System

b. In a Batch-Processing Operating System, what is the Turnaround time?

c. What level of Interaction does a user have with his/her job in a Batch-Processing Operating System?

3a. Define the following

(i.) A Process

(ii.) A Process State

(iii.) A Process Control Block

(iv.) Process Scheduling

b. Draw the Process Control Block.

4a. Briefly describe a Scheduler?

b. With the aid of a table, show the comparison of the three types of schedulers

c. Given the table

Process	Arrival Time	Execution Time	Service Time
P0	0	6	
P1	1	5	
P2	2	4	
P3	3	3	

Calculate, for each of the underlisted algorithms:

- First-Come, First-Served (FCFS) Scheduling
- Shortest -Job-Next Scheduling

i. Service time

ii. Average Wait time

5a. Briefly explain the following: