



**ELIZADE UNIVERSITY**

**ILARA-MOKIN**

**FACULTY: BASIC AND APPLIED SCIENCES**  
**DEPARTMENT: MATHEMATICS AND COMPUTER**  
**SCIENCE**

**1<sup>st</sup> SEMESTER EXAMINATION**  
**2020 / 2021 ACADEMIC SESSION**

**COURSE CODE: CSC 433**

**COURSE TITLE: Emerging Technologies**

**COURSE LEADER: Prof. Bolanle Ojokoh**

**DURATION: 2 ½ Hours**

**HOD's SIGNATURE**

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**INSTRUCTION:**

Candidates should answer any **THREE** 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. Itemize four basic technologies required for effective implementation of IoT and their applicability.

b. Discuss four important characteristics of IoT.

c. IoTs dramatically increase the amount of data available to humans. Discuss the progression in the manipulation of these data for more usefulness to humanity.

2a. What is a complex system? Itemize six characteristics of this, while stating some four real life examples.

b. The Web has gone through several distinct evolutionary stages. Four of these are prominently known. Discuss them.

c. List five devices that could be found in a smart home application and their uses.

3a. Describe the following technologies, with specific examples:

(i) RFID

(ii) Sensor Networks

(iii) Middleware

(iv) IPv6 Addressing

b. Discuss four relevant applications of IoT in the healthcare domain.

c. Discuss Privacy and Security as they serve as challenges to IoT

4a. Describe Cloud Computing vis-à-vis the "CLOUD". Cloud computing has a number of fundamental elements, discuss five of these.

b. Cloud Computing can be broadly classified into three \*aaS, also known as Cloud Service Models services provided. Discuss these along with their advantages and disadvantages.

c. Describe the concept of Virtual Reality. Discuss four application areas of this concept in Computing.

5a. What is Big Data? Big Data is characterized by an emerging set of Vs. Describe six of these.

b. The growth of "Big Data" is motivated by three key enablers. Discuss these.

c. Itemize four current and prospective applications of big data