



**BOWEN UNIVERSITY IWO, OSUN STATE**

**COLLEGE OF COMPUTING AND COMMUNICATION STUDIES**

**COMPUTER SCIENCE PROGRAMME**

**B.S.C. DEGREE FIRST SEMESTER EXAMINATION SESSION: 2023/2024**

**COURSE TITLE: NET-CENTRIC COMPUTING**

**COURSE CODE: CIT 401 COURSE CREDIT: 3 UNITS**

**INSTRUCTION: Answer any four questions TIME ALLOWED: 2 HOURS**

---

**Question One**

- a. Explain the concept of distributed systems with the aid of diagram. (8 Marks)
- b. Describe two types of Service Orientations you are familiar. (8 Marks)
- c. Discuss the main advantage of Distributed Computing (4 Marks)

**Question Two**

- a. Define Mobile Computing. (6 Marks)
- b. Discuss the current mobile technologies starting from 5G technologies. (8 Marks)
- c. Explain Near Field Communication as one of the current trends in Mobile Computing (6 Marks)

**Question Three**

- a. What do you understand by the term Network Security? (5 Marks)
- b. With the aid of examples explain the benefits of Network Security in Financial Institutions. (6 Marks)
- c. There are three key focuses that should serve as a foundation of any network security strategy: protection, detection and response. Discuss. (9 Marks)

**Question Four**

- a. With the aid of diagram explain the concept of Client Server Computing. (8 Marks)
- b. What are the features of Client Server Computing? (6 Marks)
- c. Identify the differences between the Client-Server and the Peer-to-peer configuration of networks (6 Marks)

**Question Five**

- a. Define the concept of Parallel Processing Systems (8 Marks)
- b. What are the Flynn's Classification of Parallel Systems? (12 Marks)

**Question Six**

- a. Define the term Parallel Programming Model (4 Marks)
- b. Mention and explain two widely known parallel programming models. (8 Marks)
- c. Discuss briefly, the peculiarities of the CUDA programming model. (8 Marks)