



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

University Village, Plot 91, Cadastral Zone,  
Nnamdi Azikiwe Expressway, Jabi, Abuja

**FACULTY OF SCIENCES**

**APRIL 2019 EXAMINATION**

**Course Code:** CIT832  
**Course Title:** **Operating Systems and Networking**  
**Course Credit:** Unit: 2  
**Time Allowed:** 2Hours  
**Instruction:** Answer Question 1 and any other three (3) questions

**Question 1:**

- a. State and give the requirements of a secure distributed system 3marks
  - b. Differentiate between Network Operating System and Distributed Operating System? 4marks
  - c. What are the major advantages of Distributed operating system? 2marks
  - d. Briefly explain Multiprocessor Operating Systems 2marks
  - e. List any four components used to connect two or more networks 2marks
  - f. Differentiate between Repeaters and Bridges, stating their feature and purpose 4marks
  - g. What is TFTP? (2 marks)
  - h. What protocol is used in TFTP for data transport? (2 marks)
  - i. How is TFTP session initiated? (2 marks)
  - j. How is integrity maintained using TFTP? (2 marks each)
- (25 marks)

**Question 2:**

- a.) Compare multiprocessing and multiprogramming? (6 marks)
- b.) List three protocols that are included in the TCP/IP suite of protocols. 3marks
- c.) Describe the following
  - ICMP (2 marks)
  - RIP and(2 marks)

- ARP/RARP? (2 marks)

### Question 3

- a. What are the three main purposes of an operating system? (7 marks)
- b. Explain the main difficulty a programmer must overcome in writing an operating system for a real-time environment? (3 marks)
- c. To build a robust distributed system, you must know what kinds of failures that can occur.
  - i. List three possible types of failure in a distributed system. (3 marks)
  - ii. Specify which of those in your list are applicable to a centralized system. (2 marks)

### Question 4:

- a. Name the system folders that are created in Windows 2000 to store program and data files; . (3 marks)
- b. In Windows 2000 Directories: Describe the following :
  - My Document,
  - My Computer and
  - My Network Places? (6 marks)
- c. What is a Forest? 2marks
- d. What is Auditing in Windows 2000? 2marks
- e. What specific events can be Auditing in Windows 2000? 2marks

### Question 5:

- a. what is the function of each the following Linux command library and special characters: cal, who, ^u, ^c, AD, Is -a (6marks)
- b. what are the contents of the following Linux Directories: /dev, /etc, /lib (3 marks)
- c. What is the result of the following Linux File Manipulation Commands including their various options if any? (6 marks)