



NATIONAL OPEN UNIVERSITY OF NIGERIA  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi, Abuja  
FACULTY OF SCIENCES  
DEPARTMENT OF COMPUTER SCIENCE  
**2024 1 EXAMINATION**

COURSE TITLE: OPERATING SYSTEM CONCEPT AND NETWORKING  
PROGRAMME: B.SC COMPUTER SCIENCE  
COURSE TITLE: OPERATING SYSTEM CONCEPT AND NETWORKING  
COURSE CODE: CIT 832  
CREDIT UNIT (S): 2 UNITS  
TIME ALLOWED: 2 HOURS

**INSTRUCTION: ANSWER QUESTIONS ONE (1) AND ANY OTHER TWO (2)**

QUESTION ONE (1)

- a) List and explain 5 utilities toolbox used to manipulate Macintosh hardware and software resources 5 marks
- b) Explain how User Interface can be designed using Interface Builder 10 Marks
- c) Explain the functioning of Resources Manager and Menu Manager of Toolbox 5 marks
- d) List and explain the logical structure of Windows 2000 domain 10 marks

QUESTION TWO (2)

- a) Explain the computer operating system with a clear diagram 8 marks
- b) State three reasons why study operating system is important 2 marks
- c) Due to limited resources of computer systems, there is a need to optimize the use of resources allocation, explain with the aid of relevant diagram how the resources allocation can be effectively utilized. 10 marks

QUESTION THREE (3)

- a) Explain how information is transmitted in a computer system using Open System Interconnection (OSI) reference model with appropriate diagram 10 marks
- b) Explain are the main motivation behind deployment of packet switching in data transmission 5 marks
- c) How IP gateway can be used to connect two or multiple network devices 5 marks

QUESTION FOUR (4)

- a) Explain Unicasting, broadcasting and multicasting in data communication 6 marks
- b) Write briefly on the following protocols in respect to TCP/IP 14 marks
  - i. File Transfer Protocol (FTP)
  - ii. Network Filling System (NFS)
  - iii. Remote Terminal Emulation (TELNET)
  - iv. Simple Mail Transfer Protocol (SMTP)

- v. User Datagram Protocol (UDP)
- vi. Routing Information Protocol (RIP)
- vii. Address Resolution Protocol & Reverse Address Resolution Protocol (ARP & RARP)

QUESTION FIVE (5)

- a) In a large organization, the system administrator is usually divided into many units. List three of the units and discuss them briefly 3 marks
- b) What are the four basic requirements to consider before installing Linux OS 4 marks
- c) List three other methods of installing Linux operating system 3 marks
- d) Discuss the choosing installation class when installing Linux operating system 5 marks
- e) How can a folder view as Web page? 5 marks

QUESTION SIX (6)

- a) Explain in detail, how Linux OS from Red Hat on the CD can be installed on a client machine. 20 marks

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