



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)