



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE
2025_2 EXAMINATIONS

COURSE CODE: CIT423

COURSE TITLE: COMPUTER NETWORKS AND COMMUNICATION

COURSE CREDIT: 2 UNITS

TIME ALLOWED: 2 HOURS

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

QUESTIONS

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| 1a. | List seven (7) benefits of ATM network | (7Marks) |
| b. | Describe how the following ATM switch interfaces operate | (5Marks) |
| c. | Explain the functions of a Virtual Path Identifier in ATM network | (5Marks) |
| d. | What are the functions of Cell Loss Priority in ATM cell header format | (6 Marks) |
| e. | List four (4) advantages of the small, fixed-sized cells of ATM network | (4Marks) |
| f. | List the three (3) kinds of interfaces ATM switches support | (3marks) |
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| 2a. | Differentiate between LANs and WANs | (5marks) |
| b. | Define network resource management | (5marks) |
| c. | List the network traffic control mechanisms | (5marks) |
| d. | What do you understand by stop and wait? | (5marks) |
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| 3a. | Briefly explain what a modem is all about. | (5marks) |
| b. | What are the key components of a computer network? | (5marks) |
| c. | When a network is said to experience congestion | (5Marks) |
| d. | Outline the classes of service defined for ATM network | (5Marks) |
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| 4ai. | List the classification of transmission media | (2marks) |
| 4ai. | What is a computer network? | (3marks) |
| b. | What is TCP/IP? | (5marks) |
| c. | How do the OSI and TCP/IP models differ? | (5marks) |
| d. | What is the OSI model? | (5marks) |
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| 5a. | When is a system administration? | (3Marks) |
| b. | Explain the mode of transmission used when a mobile phone call is made between a student in class and the desk officer in the office | (5marks) |
| c. | What is network and system administration? | (5marks) |
| d. | What are the challenges of system administration? | (7marks) |