NATIONAL OPEN UNVERSITY OF NIGERIA
Plot91, University Village Cadastral Zone, Nnamdi Azikiwe Express Way,Jabi-Abuja.

FACULTY OF SCIENCE AND TECHNOLOGY

Course Title: CIT722 Computer Networks   **Credit Unit:** 3

Instruction: Answer Question One and three others   **Time:** 3hrs

Question One

Q1a). Briefly discuss the following hardware components:

  i. Switches   (2marks)

  ii. Repeaters   (2marks)

  iii. Bridges   (2marks)

  iv. Routers   (2marks)

Q1b). Describe circuit switching and block switching   (6marks)

Q1c)   Discuss network operating system?   (5marks)

Q1d). Advantages and disadvantage of a client/server network   (6marks)

Question Two

Q2a). Mention and briefly discuss any three common network topologies   (6marks)

Q2b). Describe Internet Control Message Protocol (ICMP) (6marks)

Q2c). Briefly explain the following:

  i. Network adapter cards   (1mark)

  ii. Network hub   (1mark)

  iii. Network cables   (1mark)

Question Three

Q3a). List five types of protocol with specific examples   (5marks)

Q3b) Discuss the concept of DHCP (Dynamic Host Configuration Protocol)   (5marks)

Q3c) What are the properties protocols.   (5marks)

Question Four

Q4a) Compare and contrast the functions of Carrier Sense on Multi-Access Networks (CSMA) and Carrier Sense Multiple Access with Collision Detect (CSMA/CD).   (10mrks)

Q4b) Explain the principles of Peer to Peer Network Model.   (5marks)

Question Five

Q5a) What are the configuration steps required for the installation of Windows 2000 professional?   (2marks)

Q5b) Define vividly the concept of Protocol and explain briefly the key elements of this concept   (8marks)

Q5c) What are the benefits of the OSI model (5marks)

Question Six

Q6a) Mention and explain all the seven layers of OSI model. (7marks)

Q6b   Characteristics of the OSI 7 layers model (4marks)

Q6c) Discuss the workings of TCP/IP model (4marks)