

DTEMS PAST PAPER
TECHNICAL

SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF TECHNICAL EDUCATION AND MANAGEMENT STUDIES

EXAMINATION SESSION : End of Semester Two

TUTOR : Kurt Harris

PROGRAM TITLE : Computer Systems Engineering

PROGRAM CODE : 3EE-CMS-AD

COURSE TITLE : Computer Networking

COURSE CODE : CMP 204

CLASS : Year 2

DATE :

COMMENCEMENT TIME :

DURATION : 2-1/2 Hr.

ROOM :

INVIGILATOR(S) :



INSTRUCTIONS:

- This paper contains **ten (10)** questions.
- Attempt **All** questions.
- Write legibly.
- Number all questions attempted properly.
- Ensure that all parts of any question is on the same paper.
- All submitted work must be in ink/pen (preferably Blue or Black)

1. Define the following Network terminologies:

i. Channel	ii. RAID	iii. Attenuation	iv. Client
v. Server	vi. VPN	vii. Peer-to-peer	viii. Interference

(8 marks)
2.
 - a) Define a Local Area Network (LAN)? **(2 marks)**
 - b) Give three types of media used in LANs? **(3 marks)**
 - c) State the most common media used in networking and give three reasons why? **(4 marks)**
3.
 - a) Briefly explain the four types of backups and give an example of how each is used. **(12 marks)**
 - b) What are the four Proactive preventative measures a network administrator can undertake to ensure that a server is as stable as possible? **(4 marks)**
 - c) List the two types of paging and explain any one. **(6 marks)**
4.
 - a) List 4 server types that can be installed using Windows 2000 Server. **(4 marks)**
 - b) Explain the function of any two servers listed in the question above. **(4 marks)**
 - c) Differentiate between a computer workgroup and a domain. **(4 marks)**
5.
 - a) Define the term network topology. **(2 marks)**
 - b) List the 4 most common topologies used today. **(4 marks)**
 - c) With the aid of a diagram explain the operation of any one of the topologies listed above. **(5 marks)**
6.
 - a) Central to the study of networks is the layered model. In this class we have at least two layered models that we work with. For the OSI model, describe the function of the layers with one sentence for each **(7 marks)**
 - b) What are the four causes, or components, of delay in a packet switched network? What can be done to reduce each of these components? **(12 marks)**
7.
 - a) What is the role of a network adaptor? **(2 marks)**
 - b) Differentiate between a repeater and a switch. **(4 marks)**
 - c) Explain the function of a bridge. **(3 marks)**
8.
 - (a) Differentiate between a logical topology and a physical topology. **(5 marks)**
 - (b) List the four (4) basic topologies. **(5 marks)**
 - (c) Draw a labeled diagram and explain the function of any one (1). **(5 marks)**
9.
 - (a) What is meant by Channel Access Methods **(1 mark)**
 - (b) List 4 Channel Access Methods and explain any one **(9 marks)**
10.
 - (a) Why is baseband signaling instead of broadband signaling used for data communications? **(3 marks)**
 - (b) What is difference between an IP address and a MAC address? **(2 marks)**
 - (c) Why are wires twisted in a twisted pair cable? **(3 marks)**