

TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

CICM

EIT 1105: COMPUTER NETWORKS SPECIAL/ SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep 2018

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Attemptquestion ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

a) Explain two types of Ethernet cables

[4marks]

b) State the use of the following cabling tools

[4marks]

- i. Crimping tool
- ii. UTP cable stripper
- iii. Punch down tool
- iv. Cable cutter
- c) Explain three disadvantages of client server networking model [6marks]
- d) Explain the following topologies

6marks

- i. Star topology
- ii. Bus topology
- iii. Ring topology

Ouestion TWO

a) Define computer network

[1mark]

- b) State two advantages of wired network to wireless network
- [4marks]
- c) Explain the basic procedures when troubleshooting a network
- [5marks]
- d) Briefly explain the function of the following devices in computer networks[10 marks]
 - i. Switch

ii. Hub iii. Repeater iv. Gateway Bridge v. **Ouestion THREE** a) Explain the procedure and the tool used in every step to terminate a Ethernet cable [10 marks] b) State two advantages of peer to peer networking model [4marks] c) State the functions of the following DOS commands [6marks] i. **PING** ii. **IPCONFIG TRACERT** iii. **Ouestion FOUR** a) Explain the difference between a bridge and repeater in computer networks[4marks] b) State the role of network operating system in computer networks 2marks c) State the function of the following cables [4marks] Straight through cable i. ii. Crossover cable [6marks] a) Explain the following types of networks Local area network ii. Wide area network iii. Metropolitan area network b) Explain two reasons why wired network may be preferred to wireless network

a) Explain three advantages and three disadvantages of bus topology [6marks]

b) Explain the procedure and the tool used in every step to terminate a twisted cable [10 marks]

[4marks]

c) State two software's used in computer networks [2marks]

d) Define the term bandwidth [2marks]