



TECHNICAL UNIVERSITY OF MOMBASA
INSTITUTE OF COMPUTING AND INFORMATICS
UNIVERSITY EXAMINATION FOR:
INSTITUTE OF COMPUTING AND INFORMATICS
BIT2108: COMPUTER NETWORKS.
END OF SEMESTER EXAMINATION
SERIES: APRIL 2016 SERIES
TIME: 2 HOURS
DATE: May 2016 Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of 5 questions. Attempt question ONE and any other TWO questions.

Do not write on the question paper.

Question ONE

- (a) Distinguish between parallel and serial transmission mode (4 Marks)
- (b) Discuss EIGHT (8) advantages of installing computer networks (4 Marks)
- (c) Discuss the TCP/IP protocol suite (8 Marks)
- (d) Explain any FOUR(4) UTP (Unshielded Twisted-Pair) categories (4 Marks)
- (e) Describe the following topologies with the aid of a sketch
 - (i) Bus
 - (ii) Ring
 - (iii) Star (6 Marks)

Question TWO

- (a) Describe any TWO (2) major computer network software (4 Marks)
- (b) Describe the operation of any FOUR (4) key networking Devices (16 Marks)

Question THREE

- (a) Discuss with the aid of a sketch Pulse Code Modulation (10 Marks)
- (b) Discuss how Digital signals are prepared to pass through an analogue channel with the aid of a sketches using

- (i) ASK (2 Marks)
- (ii) FSK (2 Marks)
- (iii) PSK (3 Marks)
- (iv) QAM (3 Marks)

Question FOUR

- (a) Compare and contrast Circuit Switching to Packet Switching with the aid of a sketch (20 Marks)

Question FIVE

- (a) Discuss any FIVE connector losses in optical fibre cables with the aid of a sketch (10 Marks)
- (b) compare and contrast electrical transmission media (10 Marks)