TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY (DICT 14S/-EV)

EIT 2206: NETWORK ESSENTIALS

END OF SEMESTER EXAMINATION
SERIES: APRIL 2015
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
This paper consists of **FIVE** questions.

Attempt question **ONE (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Define the term network topology   **(4 marks)**

b) Briefly state SIX reasons why you prefer to install a wireless network over a wired one.
                                                                            (6 marks)

c) Differentiate between the following terms used in computer networking:
   (i) Attenuation and crosstalk
   (ii) Shielded twisted pair cable and optical fibre cable   **(4 marks)**

d) Discuss any SIX advantages of installing a computer network   **(6 marks)**

Question Two

a) With the aid of diagrams, describe the type of network media listed below   **(15 marks)**
   (i) Twisted pair cable
   (ii) Coaxial cable
   (iii) Fiber optical

b) Outline FIVE practices to ensure cables termination is successful.   **(5 marks)**

Question Three

Compare and contrast OSI reference model to TCP/IP and state networking component at each layer
                                                                            (20 marks)

Question Four

a) One of the key elements of networking is said to be hardware. Discuss the key hardware that are driving networking   **(10 marks)**

b) Discuss the key benefits of computer networking   **(10 marks)**

Question Five

a) Describe any of the following network components.   **(8 marks)**
   (i) Shared peripherals
   (ii) Networking devices
   (iii) Networking media

b) Discuss briefly any FOUR classifications of computer networks   **(8 marks)**

c) Describe any TWO reasons for using a network switch in a network   **(4 marks)**