



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION & COMMUNICATION TECHNOLOGY (DICT
13J/12J)

EIT 2106: NETWORKS ESSENTIALS

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2013

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** 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) Name any **THREE** tools used in networking. **(3 marks)**
- b) Describe any **FOUR** transmission media under bounded (physical) media. **(12 marks)**
- c) Explain the importance of a gateway on a network. **(5 marks)**
- d) Differentiate between satellite and microwave transmission media. **(6 marks)**
- e) Explain how a protocol work **(4 marks)**

Question Two

- a) Discuss **THREE** types of Networking **(15 marks)**
- b) Describe the VSAT technology **(5 marks)**

Question Three

- a) Describe any **FOUR** types of physical topologies. **(16 marks)**
- b) Distinguish between half duplex and full duplex transmission **(4 marks)**

Question Four

- a) Outline **FIVE** limitations of networking. **(5 marks)**
- b) Describe any **FOUR** devices in networking. **(8 marks)**
- c) State any **FIVE** functions of network operating system **(5 marks)**
- d) Explain why a switch is preferred to a hub in networking. **(2 marks)**

Question Five

- a) Describe the **SEVEN** layers in the open system of interconnection (OSI) reference model. **(14 marks)**
- b) Difference between a single mode and a multimode fibre **(4 marks)**
- c) Name **TWO** advantages of fibre optic cable over the coaxial cable. **(2 marks)**