



THE TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
(DICT 10M-EV)

EIT 2308: WIRELESS NETWORKS

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: FEBRUARY 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions

Answer 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) What is a wireless network? **(3 marks)**
- b) Explain **FOUR** drawbacks of any wireless network. **(12 marks)**
- c) Define bandwidth as used in wireless network. **(2 marks)**
- d) Outline **THREE** reasons why wireless network is better than wired network setup. **(3 marks)**

Question Two

- a) Briefly describe **FOUR** wifi 802.11 technology. **(8 marks)**
- b) Differentiate between WEP and WAP2 Enterprise Security modes as used in Wifi 802.11. **(6 marks)**
- c) Name **TWO** types of networks that can be set up using Wifi 802.11 technology. **(2 marks)**
- d) Explain the meaning of SSID **(2 marks)**
- e) Name any **TWO** WEP key password format. **(2 marks)**

Question Three

- a) Outline any **FOUR** services offered by cellular wireless network. **(4 marks)**
- b) Explain the functions of MSC as applied in mobile networks. **(6 marks)**
- c) Briefly describe the way an international call is routed to its destination. **(10 marks)**

Question Four

- a) Explain the difference between CDMA and GSM. **(6 marks)**
- b) Explain the differences in file transfer as applied in Wifi 802.11 and Bluetooth. **(6 marks)**
- c) List the frequency range of operation for the following:
 - (i) Mobile network **(2 marks)**
 - (ii) Bluetooth **(2 marks)**
 - (iii) Wimax **(2 marks)**
 - (iv) Wifi **(2 marks)**

Question Five

- a) Explain how the WDS feature works on a wireless router. **(4 marks)**
- b) What is the difference between wireless router and access point? **(6 marks)**
- c) Name and explain any **FOUR** natural causes that will result to wireless signal fluctuation. **(10 marks)**