



TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

EIT 2203: WIRELESS TECHNOLOGY

END OF SEMESTER EXAMINATION

SERIES:AUGUST2019

TIME:2HOURS

DATE:Pick Date Aug2019

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt any **THREE** questions.

Do not write on the question paper.

Question ONE

- a) Define the following technologies:-
 - i. Wireless client (2marks)
 - ii. Wireless Access Point (2marks)
 - iii. Wireless communication (2marks)
- b) Describe Five characteristics of an Access Point (8marks)
- c) State six components of a telecommunication network (6marks)

Question TWO

- a) Explain four major physical components of 802.11 networks (8marks)
- b) List four benefits of a wireless network (4marks)
- c) Explain three basic building blocks of 802.11 networks (8marks)

Question THREE

- a) Define the following terms:-
 - i. OSI model
 - ii. Bluetooth technology (4marks)
- b) Describe four functions of the network layer in the OSI model (8marks)
- c) Explain four benefits of CDMA for a cellular network (8marks)

Question FOUR

- a) Differentiate among the five generations of cellular technology (10marks)
- b) Explain any four reasons that has led to the first growth of wireless systems usage (8marks)
- c) Describe two characteristics of cellular telephone systems (2marks)

Question FIVE

- a) With the aid of a diagram, explain the various bands of electromagnetic spectrum (12marks)
- b) Explain the following technologies:
 - i. Frequency Division Multiple Access (FDMA) (2marks)
 - ii. Time Division Multiple Access (TDMA) (2marks)
 - iii. CDMA (2marks)
- c) State two benefits of 5G communication technology (2marks)