



# 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. Wi-Fi (2marks)
  - ii. Bluetooth (2marks)
- b) Describe Five characteristics of Bluetooth technology (10marks)
- c) Explain three key challenges of wireless LAN (6marks)

#### Question TWO

- a) With the aid of a diagram, explain the four components of 802.11 network (8marks)
- b) Describe three basic service sets of 802.11 networks (6marks)
- c) Differentiate between connection-oriented and connection-less service network (4marks)
- d) Define a wireless client (2marks)

#### Question THREE

- a) Explain two characteristics of 5G communication technology (4marks)
- b) State four benefits of 5G communication technology (4marks)

- c) State four functions of the session layer in the OSI model (8marks)
- d) List four benefits of 802.11 networks (4marks)

**Question FOUR**

- a) Describe two types of Access points (4marks)
- b) Differentiate among the five generations of cellular technology (10marks)
- c) Define cellular technology (2marks)
- d) Explain two applications of modern paging systems (4marks)

**Question FIVE**

- 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)