



# ZIMBABWE EZEKIEL GUTI UNIVERSITY

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## FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

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### DEPARTMENT OF DIGITAL TECHNOLOGY

### EXAMINATION PAPER

**COURSE CODE** : CDT 409  
**COURSE TITLE** : **Wireless Communication**  
**SPECIAL REQUIREMENTS** : None  
**DURATION** : 3 Hours  
**LEVEL** : 4.1  
**DATE** : June /July 2022  
28 JUN 2022

#### INSTRUCTIONS TO CANDIDATES:

1. Answer any 4 Questions from the whole paper.
2. The total Marks for the examination is 100.
3. The marks allocation for each question are indicated in square brackets [ ] .

**Question 1**

- a) Explain the functions of Mobile Switching Centre [10]
- b) Discuss applications of mobile computing in organisations [15]

**Question 2**

Discuss any five types of wireless communication systems

**Question 3**

Discuss the components of GSM architecture [25]

**Question 4**

Describe the following

- i. CDMA
- ii. 3 G
- iii. OFDM
- iv. Multi-user detection
- v. GSM [25]

**Question 5**

- a) Explain the following terms:
  - i. Forward Control Channel,
  - ii. Reverse Voice Channel, [10]
- b). Discuss Hard Hand Off and Soft Handoff[15]

**Question 6**

Discuss threats to wireless network and measures to mitigate them [25]

12/0 A.M