



**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** : 4.2  
**DATE** : October 2022

**06 OCT 2022**

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**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**

Discuss any five types of wireless communication systems [25]

**Question 2**

Mobile radio propagation is divided into four categories: land mobile radio, aviation mobile radio, maritime mobile radio, and satellite mobile radio. Can you describe these give advantages and disadvantages of each for each [25 Marks]

**Question 3**

Discuss the components of GSM architecture [25]

**Question 4**

Discuss the following multiplexing techniques

- i. Time Division Multiplexing,
- ii. Frequency Division Multiplexing,
- iii. Code Division Multiplexing
- iv. Space division Multiplexing [25]

**Question 5**

Mobile Communication technology has been a game changer in communication spectrum. Discuss [25]