



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

DEPARTMENT OF DIGITAL TECHNOLOGY

EXAMINATION PAPER

COURSE CODE : CDT 409
COURSE TITLE : **Wireless Communication**
SPECIAL REQUIREMENTS : None
DURATION : 3 Hours
LEVEL : 4.1
DATE : 11.0 FEB 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

- i. 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 2

Describe the following terms in wireless Communication technologies

- i. Equalization,
- ii. Diversity
- iii. Channel coding,
- iv. Speech coding

Question 3

Describe the following

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

Question 4

Mobile Communication technology has been a game changer in communication spectrum Discuss

Question 5

With Invention of wireless technologies people are now talking about smart home, smart office , smart city etc . Discuss the security concerns which come from having this type of technology.