



ZIMBABWE EZEKIEL GUTI UNIVERSITY

**FACULTY OF HEALTH, SCIENCE, TECHNOLOGY, AGRICULTURE AND
FOOD SYSTEMS DEVELOPMENT**

DEPARTMENT OF DIGITAL TECHNOLOGY AND INFORMATION SYSTEMS

EXAMINATION PAPER

COURSE CODE : CDT 410
COURSE TITLE : Mobile Computing
SPECIAL REQUIREMENTS : None
DURATION : 3 Hours
LEVEL : 4.2
DATE : October/November 2023

13 OCT 2023

INSTRUCTIONS TO CANDIDATES:

1. This paper consists of 2 sections
2. Answer **Any four (4) questions**.
3. Start each Question on a new page



There are 3 printed pages for this question paper

QUESTION 1

- a) Explain the following terms giving examples: User mobility, Device mobility [10] Computing [10]
- b) Discuss five applications of Mobile Computing [15]

QUESTION 2

- a) What is ALOHA? [10]
- b). Discuss obstacles to mobile computing [15]

QUESTION 3

- a). Illustrate clearly using a diagram describe the
 - i. Hidden and
 - ii. Exposed terminal problem [10 marks]
- b). Discuss the components of GSM architecture [15]

QUESTION 4

- a) Draw a neat diagram of WAP architecture and explain in detail. [10 marks]
- b) Explain how mobile TCP improves the TCP performance in wireless and mobile environment. [15 marks]

QUESTION 5

- a) Explain the services provided by supplementary service. [10 marks]
- b) Explain standard routing protocols for mobile communication. [15 marks]

QUESTION 6

Clearly explain the following terms as associated with mobile IP:

- a) compare and contrast IPV4 and IPV6 in mobile computing (10)
- b) Discuss the following terms

- i. Home network
- ii. Foreign Agent
- iii. Foreign Address (FA)

[3 x 5 marks]

*** Wish you all the best ***

0/10 (Am)