



MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF ENGINEERING, APPLIED SCIENCES AND TECHNOLOGY

DEPARTMENT: COMPUTER SCIENCE AND INFORMATION SYSTEMS

MODULE: MOBILE COMPUTING

CODE: INSY422

SESSIONAL EXAMINATIONS

APRIL-2024

DURATION: 3 HOURS

EXAMINER: MR T.S MUWANI

INSTRUCTIONS

- 1. Answer Any **five (5)** questions.*
- 2. Each question carries **20 marks***
- 3. Start a new question on a fresh page.*
- 4. Total marks 100.*
- 5. Additional material(s): None*

Question 1

- a) Distinguish between infrastructure-based networks and infrastructure-less networks. [10 marks]
- b) Describe the function of presentation, application, and data tiers in a mobile environment. [10 marks]

Question 2

Examine hidden terminal and exposed terminal problems with the help of a diagram. [20 marks]

Question 3

Critic a role that is played by radio and infrared signals in mobile computing. [20 marks]

Question 4

Assess why the MAC protocol designed for infrastructure-based wireless networks may not work satisfactorily in an infrastructure-less environment. Justify your answer. [20 marks]

Question 5

Explain about mobile computing. Classify its various applications in a real-world scenario. [20 marks]

Question 6

Examine an application where mobile payment may be useful and explain the different payment systems that are available. [20 marks]

Question 7

Illustrate the basic concepts of ad-hoc. [20 marks]

END OF EXAMINATION