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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR
THIRD YEAR, SECOND SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF BUSINESS AND INFORMATION TECHNOLOGY

Date: 6th December, 2022
Time: 2.30pm –4.30pm

KBI 2317 - MOBILE COMPUTING

INSTRUCTIONS TO CANDIDATES

ANSWER **QUESTION ONE (COMPULSORY)** AND **ANY OTHER TWO** QUESTIONS

QUESTION ONE (30 MARKS)

a) Explain the following terms

i) Roaming (1 mark)

ii) Mobile computing (1 mark)

b) Explain the four classifications of wireless data network (4 marks)

c) To locate and address a Mobile Station, several numbers are needed, identify four such numbers (4 marks)

d) Explain the five features of GSM networks (5 marks)

e) Distinguish between Home Location Register (HLR) and Visitor Location Register (VLR) (4 marks)

f) Explain the three different categories of service defined by GSM (5 marks)

g) Briefly explain the three supplementary services provided by GS (6 marks)

QUESTION TWO (20MARKS)

a) Explain the limitations of mobile computing (10 marks)

b) Explain standard routing protocols for mobile communication (10 marks)

QUESTION THREE (20 MARKS)

a) The importance of mobile computing has been highlighted in many fields. Describe any five fields of application (10 marks)

b) Explain the terms mobile computing and the four characteristics exhibited by a communications device (10 marks)

QUESTION FOUR (20 MARKS)

a) Discuss the requirements for mobile database management systems (10 marks)

b) Give your own thoughts on the effect of mobility on database consistency, database integrity, database distribution, and transaction execution (10 marks)

QUESTION FIVE (20 MARKS)

Using a diagram describe the simplified reference model protocol stack used to implemented GSM systems (20 marks)