TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:
BACHELOR OF SCIENCE IN INFORMATION COMMUNICATION TECHNOLOGY
(BTIT Y4)

EIT 4303: MOBILE & WIRELESS COMPUTING

END OF SEMESTER EXAMINATION
SERIES: APRIL 2015
TIME: 2 HOURS

Question One (Compulsory)

a) Not all mobile devices are wireless; not all wireless devices are mobile. Discuss this statement using examples **(6 marks)**

b) Give a brief account of the development of mobile and wireless computing to date **(6 marks)**

c) Mobile and wireless technologies have found applicability in many areas in the affairs of man. Using examples, give FOUR such areas, explaining each applicability **(8 marks)**

Question Two

a) State and explain:
   (i) TWO technical challenges, and
   (ii) TWO organizational challenges to the implementation of mobile and wireless computing in industry.
   Show how you would mitigate the challenges **(4 marks)**

b) Discuss FIVE benefits that would result from integrating a WLAN with a Hospital Information system **(10 marks)**

c) State any TWO tools you would use in the development of a mobile application. **(2 marks)**

Question Three

a) The vision of mobility in computing is that all computers communicate; all communication devices compute. Give FOUR examples where this is reality, explaining each **(8 marks)**

b) The information system of Gleaning Ltd, a milling corporation works on a wired network. Show how you would integrate wireless and mobile technologies to improve the system, by diagram (s) **(8 marks)**

c) Give TWO benefit accruing from such integrations as in (b) above **(4 marks)**

Question Four

a) Compare and contrast wired and, wireless and mobile computing **(12 marks)**

b) Distinguish between adhoc and infrastructure networks **(6 marks)**

c) What is the use of a modem **(2 marks)**

Question Five

Identify an area of interest to you and determine how you would apply mobile and wireless computing to improve functionality. **(20 marks)**