**TECHNICAL UNIVERSITY OF MOMBASA**

*SCHOOL OF BUSINESS & SOCIAL STUDIES*

DEPARTMENT OF MANAGEMENT SCIENCES


DIPLOMA IN TRANSPORT & LOGISTICS MANAGEMENT
(DTLM)


**E IT 2103 ICT FOR LOGISTICS AND TRANSPORT MANAGEMENT**


END OF SEMESTER EXAMINATIONS
**SERIES:** MAY 2016
 **TIME:**   2HRS


**INSTRUCTIONS:**
-This paper consists of **A** and **B.**
-Section A is Compulsory. Answer any **TWO** questions in Section **B.**
-Mobile phones are not allowed into the examination room
-Cheating leads to disqualification.
-This paper consists of three printed pages.

## QUESTION 1

Q1 (a)    Use the knowledge of number systems which is very essential in Computer Application's to answer the following questions.

  (i)    Convert  (a)   $691_{10}$

                  (b)   98.125

                        To Octal equivalent          (2marks)

  (ii)    Determine the decimal equivalent of the following Binary numbers

                  (a)   11011

                  (b)   111000101          (2marks)

  (iii)   Convert $6DC_{16}$ to its binary equivalent        (2marks)

  (iv)   Convert the decimal number 745 to equivalent hexadecimal number   (2marks)

  (v)    Convert the following decimal fractions to their equivalent octal fractions

                  (a) 0.75            (b)   0.21875      (2marks)

  (b)    What is Computer Security? Mention the threats and the measures to counter them in transport and logistics Security Management         (10marks)

  (c)    Explain the features of an Enterprise Application System and its application in Transport and Logistics Management.         (10marks)

Q2 (a)    Identify the meaning of E-Procurement and Explain three areas IT may cover in purchasing                       (4marks)

  (b)    Explain the meaning of the following Computer Application Concepts

                  (i)     Off the Shelf Software       (2marks)

                  (ii)    E- Catalogue           (2marks)

                  (iii)   Expert Systems         (2marks)

                  (iv)   E-Commerce          (2marks)

                  (v)    Data Warehouse        (2marks)

  (c)    Identify and Explain any three roles of Computer Applications in Transport and Logistics Management                (6marks)

Q3      A Software Exhibition displayed applications for various areas of work. Your organization is interested in an application for transport and Logistics Management. The exhibitors provide demonstration to enable potential buyer's check what functions the software provided for the area of applications. Identify and explain the Software Applications functions that would be essential for application in Transport and Logistics Management                     (8marks)

  (a) Identify and describe a Computer Application design that would support the collaborative and coordinated management of the operations of the transport and Logistics Management, highlighting the advantages and disadvantages of the Design.(12marks)

(b) Identify and describe in general the Hardware and Software components for data processing, data Communication required for an Enterprise System      (8marks)


Q4.    Our organization is large and operates in several branches scattered widely in the East African Region. The branches are also large, each with a branch management, one of the branches is the headquarters in Mombasa.

(i)    Identify and describe a computer application design that would support the Collaborative and coordinated management of the operations of the transport and logistics functions.                                                          (12marks)

(ii)    Identify and explain any advantages and disadvantage of the Design     (8marks)


Q5 (a)    you have been tasked to write a paper to explain how computer applications Employed in the transport and logistics management function can make the organization Have edge in the competitive business environment. Identify and explain any four Points your would include on the paper.                                          (8marks)

(iii)    Describe the features of the following processing devices and how each can be used in transport and logistics management, and describe how the devices are interconnected for the purpose of data communication in computers Applications for logistics management

(i)    Main frame
(ii)    Laptop and Blue Tooth
(iii)    Palmtop TCP
(iv)    Tablet
(v)    Smart phone
(vi)    Personal computer

                                                                                    (12marks)