



**TECHNICAL UNIVERSITY OF MOMBASA**  
***SCHOOL OF BUSINESS & SOCIAL STUDIES***  
**DEPARTMENT OF MANAGEMENT SCIENCES**

**DIPLOMA IN TRANSPORT & LOGISTICS MANAGEMENT**  
**(DTLM)**

**EIT 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) The knowledge of a number systems is very essential in the Design and organization of a computer application system which depends upon the number systems.

The number system includes; Decimal, Binary, Octal and hexadecimal number systems. Use the knowledge of number systems in computers Applications to answer the following Questions, showing your working.

- (i) Determine the decimal equivalents of the following Binary numbers
  - (a) 111001
  - (b) 1101.01<sub>2</sub> (2marks)
- (ii) Convert
  - (a) (122)<sub>10</sub> (2marks)
  - (b) (32.125)<sub>10</sub> to Hexadecimal equivalent (4marks)
- (iii) Convert 6 DC<sub>16</sub> to Binary Equivalent (2marks)
- (iv) Convert 6 (0.54)<sub>8</sub> Octal fraction to decimal equivalent (2marks)
- (v) Convert the following Hexidecimal fractions to Decimal Equivalents
  - (a) (0.8)<sub>H</sub>
  - (b) (AQ.328)<sub>H</sub> (2Marks)

(B) Identify and explain any specific information in transport and logistics management for which the computer application will have to ensure for the following, in terms of data security.

- (i) Confidentiality
- (ii) Integrity
- (iii) Availability when required

For each of the information above, identify the threats and appropriate measures against the threat in the Computer Application. (10marks)

(C) Explain the features of an Enterprise Application System (ERP) and its applications in Transport and Logistics Management. (10marks)

Q2. The supply chain management is spread – out in various levels and scope of the functions of an organization.

Identify any five management functions in transport and logistics and explain how information system applications can support them at each level and scope of management. (20marks)

Q3. Explain the meaning and Evaluate the following alternative approaches to computerization of a function in transport and logistics.

- (a) (i) Off the shelf software (3marks)
- (ii) Tailor made software (3marks)
- (iii) E – Procurement (3marks)
- (iv) Service outsourcing (2marks)

(b) Explain the meaning of the following concepts

- (i) Corporate procurement Portal (2marks)
- (ii) E-Commerce (2marks)
- (iii) E- Catalogue (2marks)
- (iv) Market intelligence (2marks)
- (v) E – Business (2marks)

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)