



National University of Science and Technology

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

SECOND SEMESTER FINAL EXAMINATION PAPER: 2012/2013

DATE: MAY 2013

SUBJECT: INFORMATION TECHNOLOGY CAC 1203

TIME ALLOWED: THREE HOURS (3 HOURS)

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

- 1. Answer 4 out of 6 questions**
- 2. Use the answer book provided**
- 3. Use black or blue pen**
- 4. Begin each question on a new page and**
- 5. Submit all answer books**

QUESTION ONE (25 MARKS)

- a) Define the following:
- i) Machine cycle time
 - ii) Cache memory
 - iii) Pipelining
 - iv) Register
 - v) Multiprocessing
- [5]**
- b) Using the two categories available discuss the different types of communication media. **[10]**
- c) Discuss any three areas of Artificial Intelligence. **[10]**

QUESTION TWO (25 MARKS)

- a) Explain the five basic functions of every Operating System. **[15]**
- b) Explain the role of device drivers. **[5]**
- c) Define the term utility software and give three examples. **[5]**

QUESTION THREE (25 MARKS)

- a) Illustrate and explain the basic hardware components of the Computer System. **[12]**
- b) Describe Enterprise Storage Systems and Storage Area Network. **[8]**
- c) i) What are internet technologies? **[1]**
ii) Compare and contrast intranets and extranets. **[4]**

QUESTION FOUR (25 MARKS)

You are the IT manager for a large manufacturing company and you need to source for software for use in your company.

- a) Discuss shortcomings associated with the use of open-source software? **[12]**
- b) What advantages are there for the use of such software? **[13]**

QUESTION FIVE (25 MARKS)

The concept of technology convergence is topical with most technology firms of the 21st century. Discuss this concept in light of the technological advancements that have occurred since the development of the first computer. **[25]**

QUESTION SIX (25 MARKS)

- a) Database Management System is made up of five components. Describe each of these components and how they relate to the system. **[15]**

- b) Security of computerised information is important in an organisation. Discuss why security is of importance and state how you would secure your data in a database? **[10]**