
CERTIFIED ACCOUNTING TECHNICIAN

LEVEL 1 EXAMINATION

L2.2: INFORMATION SYSTEMS

TUESDAY: 11 JUNE 2013

INSTRUCTIONS:

1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours writing).
2. This examination has **seven** questions and only **five** questions are to be attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings

QUESTION ONE

- a) You are working with a fast growing bank as a cashier and you have realized that the number of people in queues has been growing gradually. You have noticed that the long queues are attributed to lack of automated tools. Describe the technology you would advice the bank to implement to facilitate direct data capture of transactions taking place at the teller point (8 marks)
- a) Elaborate on the concept of virtual memory indicating its advantages and disadvantages (6 marks)
- b) State any four characteristics of a system in the context of system theory (6 marks)

(Total 20 Marks)

QUESTION TWO

- a) “Modern Information systems do not refer only to computers”. As somebody well exposed to issues related to IT, give proper explanations concerning the statement (6 marks)
- b) Describe any three scheduling algorithms used in process management by operating systems (9marks)
- c) State any six basic concepts of object oriented technologies (5marks)

(Total 20 Marks)

QUESTION THREE

- a) Define the term protocol in the context of computer networks and outline any three tasks that are facilitated by protocols in a network (12 marks)
- b) Outline any four reasons why application software is useful in end user computing (8 marks)

(Total 20 Marks)

QUESTION FOUR

- a) Describe the various types of translators used in programming (6marks)
- b) Carry out the tasks following the instructions as given below
 - i) Convert the Decimal 13 to Binary (3 marks)
 - ii) Convert the Binary 1000001 to Decimal (3 marks)
 - iii) Convert Binary 101 to Octal (3 marks)
 - iv) Convert Decimal 453 to Hexadecimal (3 marks)
- c) State the various number systems used in computers (2marks)

(Total 20 Marks)

QUESTION FIVE

- a) Explain any three factors that you would use to distinguish and make a decision whether to acquire off the shelf software or bespoke software (6marks)
- b) State any four basic concepts of object oriented technologies (4marks)
- c) Outline the operating principles of the following devices
 - i) Optical character reader (3marks)

- ii) Optical mouse (3marks)
- iii) Laser printer (4marks)
- (Total 20 Marks)

QUESTION SIX

- a) Outline any four factors that you could use to differentiate between LAN and WAN (4marks)
- b) Elaborate on the main features of the following software's.
- i) Wordprocessors (4marks)
- ii) Spreadsheets (4marks)
- iii) Accounting (4marks)
- c) Explain the major uses of a computer network (4 marks)
- (Total 20 Marks)

QUESTION SEVEN

- a) Examine the main reasons for carrying out system maintenance (6 marks)
- b) Outline three steps of structured programming methodology (3 marks)
- c) Discuss how information systems have affected everyday life. (6 marks)
- d) Discuss the ethical and legal considerations of Internet use (5 marks)
- (Total 20 Marks)

End of question paper

