
CERTIFIED ACCOUNTING TECHNICIAN

LEVEL 2 EXAMINATIONS

L2.2: INFORMATION SYSTEMS

WEDNESDAY: 3 DECEMBER 2014

INSTRUCTIONS:

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

QUESTION ONE

An insurance company has a team of 100 sales staff working from home. The insurance company operates three legacy systems each containing customer information and policy details. A call centre, located at the insurance company's Head Office, uses the information contained in the legacy systems to telephone customers and arrange appointments for sales visits. This is time-consuming as there is duplication of information between the three legacy systems. Details of appointments are sent by SMS messages to the cell phones used by the sales staff.

The sales staff has laptops containing customer information, but this information is usually out-of-date as it is updated only once a month from the legacy systems. Each day the sales staff have to upload the details of any sales they have made to the relevant legacy system; this takes time and the sales staff frequently make mistakes that annoy customers and cause additional work.

Both the call centre staff and the sales staff complain about the continued use of the legacy systems and the out-of-date information held on the laptops.

Required:

- a) Discuss the various options the insurance company could implement to overcome the issues with the three legacy systems. **(10 Marks)**
- b) You have read that the speed of mobile broadband is about to increase by a factor of twelve in the next two years. Discuss how this increased speed could be used by the insurance company to improve the systems used by the sales staff. **(10 Marks)**

(Total 20 Marks)

QUESTION TWO

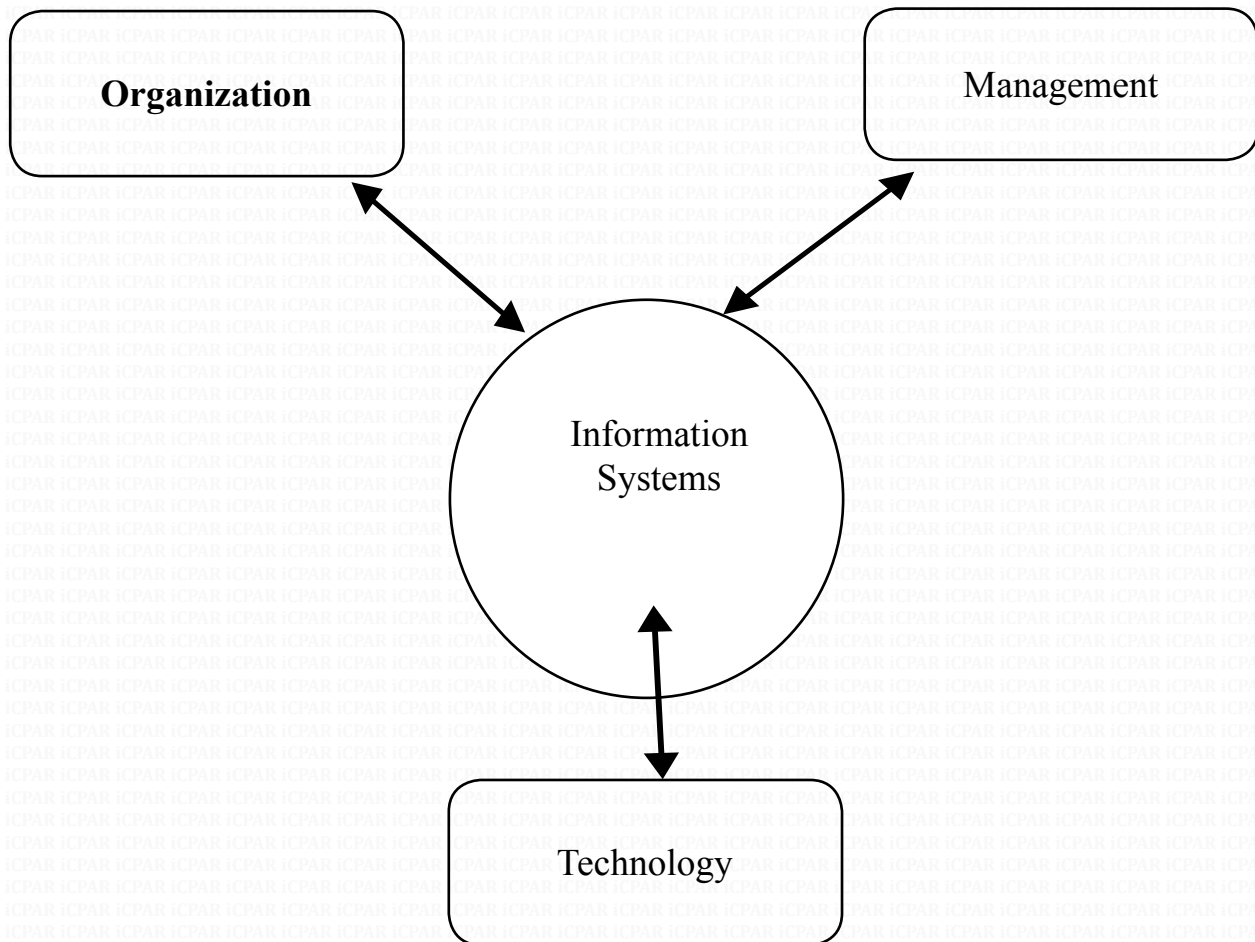
You are a consultant who has been engaged to advise an organisation on the development of an MIS strategy. Prepare a report for the Board to include the following:

- a) A description of the internal and external issues that should be considered before developing an MIS strategy. **(10 Marks)**
- b) A discussion of the effectiveness of Porter's Competitive Forces Model and his Value Chain Analysis process into the development of the MIS strategy. **(10 Marks)**

(Total 20 Marks)

QUESTION THREE

Referring to the exhibit below:



- Explain the three dimensions of the Information System. **(3 Marks)**
- IT investment cannot be effective without complementary investments in other assets.
Explain at least three investments in assets required to build an effective IT system. **(6 Marks)**
- Explain at least three types of Information Systems from a constituency perspective and give examples. **(6Marks)**
- List five moral dimensions of the information age. **(5 Marks)**

(Total 20 Marks)

QUESTION FOUR

- A business man wants to install a wireless network in his guest house. He approaches you seeking technical advice whether to install the network using Bluetooth or Wi-Fi technology. Which advice can you give him and why? **(10 Marks)**
- Explain the business value of having an Intranet in the company **(5 Marks)**
- What do you understand by EDI? **(5 Marks)**

(Total 20 Marks)

QUESTION FIVE

- a) Briefly elaborate on the four distinct stages of systematic management of information system security
(10 Marks)
- b) “Securing an Information System requires physical access controls and strong authentication methods like passwords, which are sometimes compromised”

Required:

What is your recommendation on how an organization can limit the risks associated with Password paradigm?
(10 Marks)

QUESTION SIX

- a) The organization database administrator is decided on implementing the distributing database approach in the organization. You have been approached by the organization’s operation manager to offer your professional advice on whether management should accept or reject the move.

Required:

- Advise management based on the benefits of distributing database approach
(8 Marks)
- b) Explain at least four factors to be considered by the organization’s management in forming its decision on whether to distribute or not to distribute the organization data.
(12 Marks)
- (Total 20 Marks)

QUESTION SEVEN

- a) Differentiate between the following:
- i) PROM and EPROM (2 Marks)
 - ii) Bit and Byte (2 Marks)
 - iii) System Software and utility software (2 Marks)
 - iv) Flat bed and handheld scanners (2 Marks)
- b) i) Give any three functions of any Operating system (3 Marks)
- ii) State three examples of Operating Systems (3 Marks)
- iii) Explain the meaning of the internal and external MS-DOS commands (2 Marks)
- c) Explain the meaning of the following terms as pertains to storage devices
- i) Primary storage (2 Marks)
 - ii) Secondary storage (2 Marks)

(Total 20 Marks)

End of question paper