

INSTITUTE OF CHARTERED ACCOUNTANTS (GHANA)



**MAY 2011 EXAMINATIONS
(PROFESSIONAL)**

PART 1

**BUSINESS INFORMATION SYSTEMS
(Paper 1.4)**

TIME ALLOWED:

Reading & Planning	-	15 Minutes
Workings	-	3 Hours

SECTION A: COMPULSORY

READ THE FOLLOWING SCENARIO CAREFULLY AND ANSWER THE QUESTIONS BASED ON THE SCENARIO

SCENARIO

Pelp Ltd is a manufacturer of children's food with a factory, head office, and two (2) distribution outlets in Accra. The factory and head office are on the same premises.

Pelp Ltd has a centralised Information Systems (IS) department and operates with an IBM minicomputer to which are connected twenty (20) dumb terminals that are used by both the IS and other staff of the company.

The company has six major departments besides the IS department and all of them depend on the centralised IS department for IS services.

A number of PCs are also available for use within the company for certain clerical and administrative jobs.

Staff at the various departments raise vouchers for the transactions they generate and enter these vouchers using their dumb terminals.

Each member of staff has an authority level allocated to him/her, together with a password.

This is meant to serve logical access purposes. At the start of each day's work, two particular officers from the IS department separately enter two halves of a code (password) that then starts the minicomputer for work to commence for the day.

The major processing activities for Pelp Ltd are run in batch mode and there is a data control section within the IS department that ensures timelines and accuracy of input data prior to processing, and accuracy of the outputs before these are made available to the user departments.

The vouchers that are input are sent to the IS department which ensures they are returned to the various user departments the next morning (if it is a working day).

Data validation routines are available at input time for the staff to identify any errors and correct them. Verification of data, however, is carried out at the data control section by printing a check report of the data input and doing a call-over, using the vouchers.

Any input errors are brought to the attention of the user departments which then have the responsibility of correcting them. The corrections are further checked and finalised before processing can commence.

Answer the following questions which are based on the scenario.

QUESTION 1

a) Explain the following terms as used in the passage:

- i) Dumb terminal
- ii) Batch processing
- iii) Data verification
- iv) Authority level.

(12 marks)

b) An input error was detected from a user department where a sales figure of GHS705.90 was entered as GHS507.09

Describe how the error should be corrected.

(8 marks)

(Total: 20 marks)

QUESTION 2

a) It is proposed to track the expenditure incurred by the Information System (IS) department and, possibly, recover it.

Describe any **two (2)** approaches that may be adopted.

(10 marks)

b) At the start of a certain working day, one of the two officials who were charged with entering the code on the system for work to commence failed to report for work.

Outline a procedure that could be used by Pelp Ltd to ensure that work is not held back in such a circumstance.

(10 marks)

(Total: 20 marks)

SECTION B:

ANSWER ANY THREE (3) QUESTIONS FROM THIS SECTION

QUESTION 3

A medium-sized firm in the business of producing and distributing six (6) lines of consumer products has a total of four (4) branches and Head Office in Accra.

It is proposed to automate the operations of the firm.

As the prospective Accountant, you have been approached and requested by the General Manager (Operations), to advise on the choice of computer system for the purpose.

Required:

In the form of a memorandum, prepare your response to the General Manager (Operations) detailing the main requirements and the approach to be adopted.

20 marks

QUESTION 4

- a) Describe any **four (4)** components of a Local-Area network (LAN).

(16 marks)

- b) On a typical LAN, what is meant by a 'print server'?

(4 marks)

(Total: 20 marks)

QUESTION 5

- a) Explain the term 'business process re-engineering (BPR)'.

(10 marks)

- b) In a typical BPR methodology, why is it necessary to develop the business vision and process objectives?

(6 marks)

- c) State any **two (2)** advantages of BPR.

(4 marks)

(Total: 20 marks)

QUESTION 6

- a) In the context of Information Systems, what is meant by the term 'documentation'?
(6 marks)
- b) State any **five (5)** benefits served by documentation.
(10 marks)
- c) What is a 'System specification'?
(4 marks)

(Total: 20 marks)

QUESTION 7

- a) Explain the following:
- i) Project *(2 marks)*
 - ii) Project budget *(3 marks)*
- b) From the point of view of the project manager, it is very important for a project to have a formal start point. This is achieved by the production of a project initiation document (PID).

Required:

Describe any **five (5)** of the basic sections of a PID.

(15 marks)

(Total: 20 marks)