

BCS THE CHARTERED INSTITUTE FOR IT

BCS HIGHER EDUCATION QUALIFICATIONS
BCS Level 6 Professional Graduate Diploma in IT

MANAGEMENT INFORMATION SYSTEMS

Monday 9th November 2020 - Afternoon

Answer **any** THREE questions out of FIVE. All questions carry equal marks.

Time: THREE hours

Answer any Section A questions you attempt in Answer Book A
Answer any Section B questions you attempt in Answer Book B

The marks given in brackets are **indicative** of the weight given to each part of the question.

Calculators are NOT allowed in this examination
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Section A
Answer Section A questions in Answer Book A

A1.

You have just started working for a medium-sized accountancy organisation as the Information Systems Manager. Around 200 members of staff use networked desktop PCs to carry out a variety of financial and other administrative tasks. While files are mostly stored centrally on a set of servers, there is currently no coordination regarding the use of standard software products and document formats.

- a) In the form of a memorandum to the Managing Director, discuss **THREE** benefits of introducing a formal Office Information System (OIS) to this environment.
(15 marks)
- b) Describe how you would measure the benefits of the OIS once it has been introduced.
(10 marks)

A2.

“Allowing access to our MIS from mobile systems will inevitably lead to disaster”.

Describe **FIVE** aspects of MIS design or implementation which will have to be considered to prevent this comment from becoming true when allowing access from mobile devices. You should state any assumptions which you make.

(25 marks)

A3.

The Head of IS Applications for your organisation has always resisted the introduction of application development by end-users. She claims that application development by “non-specialists” will inevitably be of a lower quality.

- a) Discuss **THREE** reasons why you either support or reject this view.
(15 marks)
- b) Describe how end-user MIS could be introduced to a traditional MIS environment while managing risk.
(10 marks)

Section B
Answer Section B questions in Answer Book B

B4.

Discuss **THREE** key similarities and/or differences for **EACH** of the following pairs of MIS concepts:

- a) Management Reporting Systems (MRS) and individual Decision Support Systems (DSS);
- b) Multi-dimensional database design and two-dimensional database design;
- c) Text mining and data mining;
- d) Technical metadata and business metadata.

(25 marks)

B5.

A national chain of food retail outlets wants to improve its MIS capabilities. Each retail outlet collects data about the individual sales of products into a separate database which is implemented using local software and IT platforms. The Managing Director (MD) wants to access information so that he can monitor company progress towards its sales Key Performance Indicators (KPIs). He also wants his retail outlet managers (many of whom are inexperienced computer users) to directly receive:

- a monthly sales report by product type for their retail outlet.
- a report comparing the overall monthly sales performance of individual outlets.
- *ad-hoc* access to sales data for flexible reporting.

With the aid of one or more relevant supporting diagrams, describe and justify a Business Intelligence (BI) system that could be employed to support the requirements defined by the MD. Make sure that your answer includes a:

- a) description of how each user role would interact with the BI system in order to request and receive information,
- b) discussion of the potential data sources for the BI system and any accompanying Extract-Transform-Load (ETL) requirements, and
- c) discussion of how the BI system might be developed using a phased approach.

(25 marks)

End of Examination