BCS THE CHARTERED INSTITUTE FOR IT

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

MANAGEMENT INFORMATION SYSTEMS

Thursday 7th October 2021 – Afternoon

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

Time: THREE hours

Answer any <u>Section A</u> questions you attempt in <u>Answer Book A</u> Answer any <u>Section B</u> questions you attempt in <u>Answer Book B</u>

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

Calculators are **NOT** allowed in this examination.

Section A Answer Section A questions in Answer Book A

A1.

With the aid of illustrative examples, describe **ONE** key benefit and **ONE** key challenge associated with **each** of the following MIS developments:

- a) The provision of a near-real time Business Intelligence (BI) system.
- b) The development of a BI system employing a data warehouse based on a Data Mart Bus architecture.
- c) The development of a Decision Support System that simulates a Company's production process.
- d) The outsourcing of a DSS development project.

(25 marks)

A2.

Simon (1977)'s decision making model separates the phases of decision making into:

- Intelligence
- Design
- Choice
- a) Explain what **each** of the **THREE** phases of Simon (1977)'s Decision Making model entails.

(7 marks)

b) Outline the key features of an OLAP tool and discuss the extent to which an OLAPbased MIS is useful in supporting Simon (1977)'s phases of decision making.

Illustrate your answer with examples based on the Sales & Marketing function of an organisation.

(18 marks)

A3.

Explain, with supporting examples, how and why **each** of the following can influence the success of an MIS development project:

- a) User views of the resultant MIS and what it will provide.
- b) Top management support.
- c) The attributes of the MIS development project manager.
- d) The existing IT infrastructure within the target organisation.

(25 marks)

Section B Answer Section A questions in Answer Book B

B4.

A manufacturing company needs to decide which out of three available BI reporting tools is the most appropriate to adopt.

a) Explain and justify **FIVE** factors that would need to be considered as part of this selection decision.

(15 marks)

b) Outline a process that would enable the company to select the most appropriate BI reporting tool whilst taking into account the FIVE factors you have identified in a).
(10 marks)

B5.

For **each** of the following technologies, provide a suitable definition and discuss the extent to which it impacts on the provision of corporate MIS:

- a) Big data;
- b) Artificial Intelligence (AI);
- c) Mobile Computing.

Illustrate your answer with supporting real-life examples wherever possible.

(25 marks)

End of Examination