UNIVERSITY OF LONDON

CO1108 ZA

BSc, CertHE and Diploma EXAMINATION

COMPUTING AND INFORMATION SYSTEMS and COMBINED DEGREE SCHEME

Information systems: Foundations of e-Business

Wednesday 08 May 2019: 10.00 – 13.00

Time allowed: 3 hours

DO NOT TURN OVER UNTIL TOLD TO BEGIN

There are **SIX** questions in this paper. Candidates should answer **FOUR** questions. All questions carry equal marks, and full marks can be obtained for complete answers to a total of **FOUR** questions. The marks for each part of a question are indicated at the end of the part in [.] brackets.

Only your first **FOUR** answers, in the order that they appear in your answer book, will be marked.

There are 100 marks available on this paper.

Calculators are not permitted in this examination.

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Question 1   Goldstar Estate Agents

Goldstar Estate Agents has been selling houses throughout the UK for over 50 years. With branches across London, the Midlands and the north of England, it has an excellent reputation for its services. Two years ago Goldstar made the decision to create a web presence that would allow its customers not only to look at potential homes but also to book viewings.

Although the new website has performed well, Goldstar wishes to extend its functionality so that it can provide greater levels of customer intimacy and service to its customers.

Goldstar also wishes to create more meaningful information for its business from the website.

At a recent management meeting it was also said that due to the success of the website the operation in some of its branches has become less satisfactory. There have also been complaints from customers about the levels of customer service provided by staff who seem be relying on the website far too much and not providing the personal service they once did.

You have been hired as a consultant to write a report for the management team answering the following key questions.

(a) Describe customer intimacy and explain how Goldstar can use its website to achieve greater customer intimacy. Candidates will be awarded up to **TWO** marks for defining customer intimacy and up to **THREE** marks for explaining how it can be achieved by Goldstar.   [5]

(b) Give **THREE** examples of how Goldstar could use its web presence to generate meaningful management information. Candidates will be awarded up to **FIVE** marks for each example given.   [15]

(c) How could information systems help Goldstar to achieve operational excellence? Candidates will be awarded up to **TWO** marks for defining the term operational excellence and up to a further **THREE** marks for explaining how it can be achieved within Goldstar's branches.   [5]

Question 2   Stacys Greeting Cards

Stacys is a national business selling greeting cards to the public. It has 50 branches across the UK and over 200 employees.

Although Stacys is a very successful business and has excellent information systems, one area in which it still finds difficulty is in collaborating between the different branches. It is often the case that branches fail to coordinate stock levels and pricing.

You have been hired by Stacys as a consultant to help them increase levels of collaboration between branches through the use of information technology. You have been asked to write a report containing answers to the following questions.

(a) Identify **FOUR** different collaboration tools that are available to help the Stacys branches work together. Following this, recommend the most useful collaboration tool for Stacys and state why. Candidates will be awarded up to **THREE** marks for each collaboration that they identify and up to a further **THREE** marks for the recommendation they make.   [15]

(b) Describe the **FIVE** steps you would take when using a time/space matrix to determine the collaboration needs of Stacys. Candidates will be awarded **TWO** marks for each step identified and described.   [10]

Question 3   Business Systems and Processes

(a) Define the term 'business process'. List **FIVE** business processes related to the creation of a mobile phone, and then **FIVE** business processes related to the running of a medical hospital.

Candidates will be awarded **TWO** marks for defining the term business process and up to a further **FIVE** marks for describing each of the five processes for each description given.

[12]

(b) Compare and contrast information technology with information systems and list **FIVE** core strategic objectives an information system can help a business to achieve.

Candidates will be awarded up to **THREE** marks for comparing and contrasting information technology with information systems and up to a further **ONE** mark for each of the five functions of an information system they list.

[8]

(c) Define the term 'value chain' and explain how a chain of cinemas could use value chain analysis to better understand its business processes. Candidates will be awarded up to **TWO** marks for defining the term value chain and up to a further **THREE** marks for explaining how a cinema could use such a value chain to better understand its business.

[5]

Question 4   Information Systems

Identify and describe **FIVE** types of information systems that serve the main management groups within a business. Candidates will be awarded up to **FIVE** marks for each type of information system identified and described.   [25]

Question 5   Database Technologies

(a) Describe the ways in which database technologies could be used by a clothing manufacturer to achieve low-cost leadership. Candidates will be awarded up to **FIVE** marks for the description.   [5]

(b) Describe the ways in which database technologies could be used by a furniture manufacturer to achieve product differentiation. Candidates will be awarded up to **FIVE** marks for their description.   [5]

(c) Describe **TWO** ways in which a business's data can be become redundant or inconsistent. Following this, describe **ONE** method that a company could use to improve the quality of the data in its databases. Candidates will be awarded up to **TWO** marks for each way they describe how business data can be redundant and up to a further **ONE** mark for the method described to improve the quality of data in a company's databases.   [5]

(d) A small publishing company you work for wants to create a new database for storing information about all of their author contracts. List **FIVE** factors that will influence how you design the database. Candidates will be awarded up to **TWO** marks for each factor listed.   [10]

Question 6   Computer Ethics

(a) Define NORA technology and explain how it works. Candidates will be awarded up to **FIVE** marks for defining NORA technology and up to a further **FIVE** marks for explaining how it works for both governments and the private sector.   [10]

(b) Define and describe the basic concepts of responsibility, accountability and liability as applied to ethical decision-making. Candidates will be awarded up to **FIVE** marks for each concept defined and described.   [15]

END OF PAPER