

THIS PAPER IS NOT TO BE REMOVED FROM THE EXAMINATION HALLS

UNIVERSITY OF LONDON

CO3323 ZA

BSc Examination

**COMPUTING AND INFORMATION SYSTEMS AND CREATIVE
COMPUTING AND COMBINED DEGREE SCHEME**

Electronic Commerce

Date and Time: Tuesday 2 May 2017 : 14.30 - 16.45

Duration: 2 hours 15 minutes

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

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

There are 75 marks available on this paper.

No calculators should be used.

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Question 1

Evolution of E-commerce

- (a) Google was not the first mover in the search engine market, although it is now the most successful. Its success is attributed not only to its unique revenue model, but also its desire to continually reinvent itself. Describe how Google's search engine differs from earlier search engines in terms of revenue model and design.

Up to five marks will be awarded for a detailed description of the revenue model and up to five marks will be awarded for a description of the design. [10]

- (b) Today, electronic commerce is seen as a major success story. Many new businesses aim to establish a full electronic commerce presence as part of their business strategy. Whether companies are selling directly to customers or to other businesses, electronic commerce has become a great success story in business.

The history of electronic commerce can be understood as comprising of **THREE** phases: innovation, consolidation and reinvention. For each phase, describe its major characteristics. For one successful electronic commerce company you know, describe how they operate today in terms of the electronic commerce facilities they provide and analyse the factors that make them a successful electronic commerce business.

Up to three marks for each phase described. Up to six marks will be awarded for the business described and analysed. [15]

Question 2 Scenario: The Office Break-in

- (a) A local government agency handles social care records for all children in the borough. These records are kept on paper files and individual personal computers. These personal computers include laptops and desktop computers in their offices.

There has been a break in in the offices. Personal computers were stolen and filing cabinets turned upside down. An investigation has started. The result of this investigation is that they did not have a good security strategy.

You have been hired to write a new strategy to be implemented across the government agency. This strategy must address each of the **SIX** dimensions of e-commerce security, giving an example for each and explaining what the effect of such a breach might be.

Up to seven marks will be awarded for the overall report. Up to three marks will be awarded for each dimension described with an example.

[25]

Question 3

Website Business Technologies

- (a) Business to business online auctions take many forms. The principle aim of such auctions is to allow businesses to dispose of stock at the highest possible price. Two classic approaches are English and Dutch auctions. Compare and contrast these **TWO** approaches to implementing auctions and provide two real world examples of businesses that use each approach.

*Up to six marks will be awarded for comparison of each auction approach.
Up to four marks will be awarded for real world examples.*

[10]

- (b) Recommender systems enhance the potential of sales to customers by recommending products and services on the basis of user behaviour and previous purchases. Describe **THREE** electronic commerce websites that implement recommender systems in an effective way. Detail how recommendations are made to users.

Up to five marks will be allocated for each website implement recommender systems discussed.

[15]

Question 4 Scenario: Huld Records

Huld Records is a company that organises events across Europe and the US buying and selling vinyl LPs and singles. This includes anything from old records that may have a historical or rare value, to new records, especially ones utilised by DJs in the dance and hip-hop music genres. Diverse types of record collectors travel to these events to buy and sell their collections. These collectors also use eBay and other auction sites to buy and sell vinyl records, and have many friends, music critics and experts online with whom they discuss their purchases and the potential value of rare records. Everyone in the vinyl industry is excited to hear that sales of vinyl records are on the increase in Europe.

As a company, Huld Records has decided to set up an online vinyl records company. The idea is to provide a specialist website for record collectors to buy and sell records and read informed reviews about rare records' availability, value, etc.

Huld Records also wish to create a range of their own products to sell at their events and online. This range will consist of: t-shirts, key-rings and books on rare vinyl, only available to attendees at events and online. This, it is hoped, will bring a degree of exclusivity to this range, something collectors often like.

For this question, you must use the information provided in the scenario above.

- (a) A key reason for creating a business online is the potential to have very low transaction costs when supplying products or services to customers. Describe **FIVE** transaction cost savings Huld Records could make by creating an online shop, instead of a traditional shop on a High Street.

Up to two marks will be awarded for each transaction cost discussed. [10]

- (b) Describe how, through creating a virtual community on the new website, Huld Records could build long-term relationships with customers. Include in your answer a description of **FIVE** different ways in which they could use a virtual community to obtain valuable information about future products to sell.

Up to three marks will be awarded for each use identified and discussed. [15]

Question 5 Scenario: Antiques in Homes Magazine

Antiques in Homes Magazine is an internationally renowned quarterly magazine which gathers what it considers are the best examples of antiques in homes in the UK. During its 50-year history, it has won countless antiques industry awards, and it is viewed as one of the best examples of trends and movements in antiques in homes. All of the major antiques dealers and markets advertise in the magazine.

Antiques in Homes Magazine has recently seen a drop in sales which, after examination, it has attributed to its lack of an internet presence. Furthermore, its leading competitor, Historical Homes Today, not only has an online version of its publication, but also a mobile application which allows people to record comments and ideas on their mobile devices and share them with a virtual community.

If Antiques in Homes Magazine is to make the transition online, it feels that this must be achieved by not cannibalising its print business. It is important that the online version not only offers its readers something different in terms of content, but also has its own unique revenue streams. Antiques in Homes Magazine wants to make an M-Commerce application to gain a competitive advantage over its rivals.

You have been hired as an internet consultant to write a report detailing the following for Antiques in Homes Magazine:

- (a) Discuss **THREE** forms of banner advertising. Your answer should also include an explanation of the process of constructing banners and banner intrusiveness.

Up to five marks will be awarded for a detailed description of different forms of advertising. Up to three marks will be awarded for an explanation of the process of constructing banners, and up to two marks for discussion of banner intrusiveness.

[10]

- (b) Describe **THREE** approaches that antique homes could take to using on-line video to enhance its potential sales. For each approach describe the potential benefits it offers and provide one real world example of a business that uses this approach.

Up to four marks will be awarded for each approach to using use online video described. Up to three marks will be awarded for real-world examples given.

[15]

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