

THIS PAPER IS NOT TO BE REMOVED FROM THE EXAMINATION HALLS

UNIVERSITY OF LONDON

291 0323 ZA

BSc Examination
for External Students

**COMPUTING AND INFORMATION SYSTEMS AND
CREATIVE COMPUTING**

Electronic Commerce

Dateline: Wednesday 20 May 2009 : 10.00 – 12.15 pm

Duration: 2 hours 15 minutes

There are five questions on this examination paper. Candidates should answer **THREE** questions. Full marks will be awarded for complete answers to **THREE** questions. Candidates must not attempt more than the required number of question.

Calculators are not allowed.

QUESTION 1

- (a) Use two real world examples of Internet technology software to describe each tier of the classical three-tier client/server architecture of electronic commerce systems. Explain the role of each tier and how it integrates with the next. Your answer should also explain how the three-tier client/server architecture may be deployed as Internets, intranets, and extranets

[10 Marks]

- (b) Describe real world examples of software applications that enable users to benefit from using the following five Internet protocols: HTTP, SMTP, IMAP, POP, FTP.

[5 Marks]

- (c) Describe in detail the role and evolution of markup languages used in electronic commerce. Your answer should include a discussion of which languages are used today and which tools are used to develop software applications with them.

[10 Marks]

QUESTION 2

- (a) Using the following categories of E-business strategies provide a real world example of a company undertaking each strategy (five Companies in total) and an explanation of how it executes the strategy on-line.
- (i) Business-To-Business E-Commerce
 - (ii) Business-To-Consumer E-Commerce
 - (iii) Consumer-To-Consumer E-Commerce
 - (iv) Business-To-Government E-Commerce
 - (v) Fee-for-Transaction

[10 Marks]

- (b) Referencing two real world companies, compare and contrast how each company is using electronic commerce technologies to optimise their traditional commerce activities, thereby increasing the effectiveness and efficiency of businesses. Include in your answer two advantages your chosen companies benefit from and two disadvantages they may suffer by using electronic commerce.

[10 Marks]

- (c) Provide a detailed discussion of a real world company's on-line presence that you consider to be an "Effective Web Presence". Include in your answer a discussion of what you consider to be the characteristics of an effective web presence and how the company has created a website that has these characteristics through its design and implementation.

[5 Marks]

QUESTION 3

- (a) Active content delivered over the Internet, embedded in dynamic WWW pages, is one of the most serious threats to client computers connected to the Internet. Compare and contrast Cookies, Anti-Virus Software and Digital Certificates as methods of protecting client computers.

[15 Marks]

- (b) Using real world examples of software used to create Firewalls and Proxy Servers discuss how they can be used to protect electronic commerce servers.

[5 Marks]

- (c) Compare and contrast public key and private key encryption as methods of securing data transmissions.

[5 Marks]

QUESTION 4

(a) Compare and contrast English and Yankee auctions and define each of the following auction processes:

- Dutch auctions
- Second-price sealed-bid auctions
- Open-outcry double auctions

[10 Marks]

(b) Describe 10 guidelines that a company can follow when creating a Web site, using a customer-centric approach.

[10 Marks]

(c) A primary method for electronic payments is Electronic Cash. Discuss the advantages and disadvantages of using Electronic Cash.

[5 Marks]

QUESTION 5

- (a) Discuss the concept of a digital content revenue model and provide two real world examples of businesses that use such a model.

[5 Marks]

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

[10 Marks]

- (c) Discuss the usage of virtual communities as technologies for adding stickiness to web sites.

[10 Marks]