UNIVERSITY OF LONDON

FOR EXTERNAL STUDENTS (East)

B. Sc. Examination 2005

COMPUTING AND INFORMATION SYSTEMS

CIS323   E-Commerce

Duration: 2 hours 15 minutes

Date and time:

There are five questions on the paper. Please answer three questions. Full marks will be awarded for complete answers to three questions. Candidates must not attempt more than the required number of questions. Calculators are not allowed.

THIS EXAMINATION PAPER MUST NOT BE REMOVED FROM THE EXAMINATION ROOM

QUESTION 1

(a) Compare and contrast the roles of the various packet-switching protocols and technologies used to transfer information between computers on the internet. Include in your answer a detailed discussion of the role of the Transmission control and Internetworking protocols.

[10 Marks]

(b) Briefly compare and contrast the roles of five internet protocols other than TCP/IP.

[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) Choosing an electronic commerce software package can be a bewildering exercise for a company. Describe in detail the key factors that will determine which kind of electronic commerce software is best suited to a company. Include in your answer a detailed description of the requirements for a electronic commerce solution.

[**10 Marks**]

(b) Electronic Commerce solutions range from small, inexpensive ISP-hosted solutions to large scale business solutions. Compare and contrast inexpensive ISP-hosted solutions, Mid-range systems and Large business solutions.

[**5 Marks**]

(c) How can the internet, a so-called "stateless" machine, keep track of a person's preferences between browsing sessions? Are there any security restrictions that a browser could impose that would force a change in the way information about users is recorded?

[**5 Marks**]

(d) Describe the reasons why a company might opt for a hosting service to manage its electronic commerce solution.

[**5 Marks**]

QUESTION 3

(a) Compare and contrast various approaches to protecting client computers which are advised if a customer wishes to conduct electronic commerce securely. Include in your answer a discussion on the use of cookies, approaches to monitoring active content and the use of digital certificates.

[**10 Marks**]

(b) Describe in detail the use of encryption in ensuring channel secrecy when providing customers with secure channels for communication. Include in your answer a comparison of public and private key encryption.

[**10 Marks**]

(c) Describe in detail methods for protecting intellectual property online. Include in your answer a discussion of property protection software, hostname blocking and the use of proxy servers.

[**5 Marks**]

QUESTION 4

(a) Discuss in detail the evolution of Electronic Data Interchange (EDI). As well as describing its history your answer should include a description of how it works, and why businesses are using Open EDI communications between suppliers and customers.

[**10 Marks**]

(b) Compare and contrast auction sites in terms of bidding processes, market segment and the different types of auction used by companies to conduct electronic commerce.

[**10 Marks**]

(c) Graphics, plug-ins, and e-mail attachments are the most common method for spreading viruses and malicious programs. Explain how these technologies are used to spread security problems.

[**5 Marks**]

QUESTION 5

(a) Describe how virtual communities maybe used by companies to help promote products and services and provide support to customers. Include in your answer a discussion of the notion of an intangible asset called stickiness.

[10 Marks]

(b) Product differentiation, relevance to the user and perceived value are critical elements of branding strategy. Compare and contrast each of these elements and suggest how the techniques of rational branding and affiliate marketing may be used to promote a business brand on the Web.

[5 Marks]

(c) The relative cost effectiveness of banner advertising is constantly being evaluated by companies. Write a detailed description of the different forms of banner advertising currently being deployed. Include in your answer an explanation of the process of constructing banners including authoring tools, formats and levels of intrusiveness.

[10 Marks]