

UNIVERSITY OF LONDON

GOLDSMITHS COLLEGE

B.Sc. Examination 2002

COMPUTING AND INFORMATION SYSTEMS

Hemis (IS 530013A) CIS323 E-Commerce (DEFERRED)

Duration 2 hours and 15 minutes

Do not attempt more than FOUR questions on this paper. Full marks will be awarded for complete answers to FOUR questions.

Electronic calculators may be used. The make and model should be specified on the script. The Calculator must not be programmed prior to the examination. Calculators which display graphics, text or algebraic equations are not allowed.

**THIS EXAMINATION PAPER MUST NOT BE REMOVED FROM
THE EXAMINATION ROOM**

Question 1

- (a) It is commonly understood that 'The Internet' would not be possible without 'packet switching networks'. Why? Include in your answer a diagram showing the routing of message packets via a packet switch network.
[10 Marks]
- (b) What is the role of TCP/IP in a packet switching network such as the Internet? Include in your answer a diagram showing the TCP/IP architecture including its five protocol layers.
[10 Marks]
- (c) What is the relationship between an IP Address, a Domain Name and a Uniform Resource Locator?
[5 Marks]

Question 2

- (a) What are Active X objects and what is the security threat associated with them?
[5 Marks]
- (b) Communication channel threats (on the Internet) are organised around the classifications of secrecy, integrity and necessity. Briefly describe each of these classifications.
[10 Marks]
- (c) Discuss the need to protect client computers from threats that originate from software and data on the Internet and in particular how Microsoft Internet Explorer and Netscape Navigator provide client-side protection.
[10 Marks]

Question 3

- (a) Discuss the primary issues concerned with the use of Electronic Cash from a buyers and sellers perspective. Include in your answer approaches to holding electronic cash and the advantages and disadvantages of using Electronic Cash
[10 Marks]
- (b) Describe an Electronic Wallet and its role in persuading potential customers to buy goods and services from E-commerce businesses. Include in your answer the significant variations between implementations of Electronic Wallets and the role of the proposed Electronic Commerce Modelling Language (ECML).
[10 Marks]
- (c) Briefly describe the proposal of the Secure Electronic Transaction (SET) Protocol and explain how SET-protected payments work.
[5 Marks]

Question 4

- (a) Discuss three broad categories of web auction sites that have emerged in this rapidly growing online business. Include in your answer an explanation of how each type of auction operates and any other auction-related services that are provided.

[10 Marks]

- (b) Define what a virtual community is and describe how can these communities be used to help a business promote its products and services and provide support to its customers.

[10 Marks]

- (c) Describe the services that an escrow service company offers. Give one advantage and one disadvantage of using an escrow service.

[5 Marks]

Question 5

- (a) Electronic commerce threats involve security issues throughout the 'commerce chain'. Discuss which electronic commerce threats exist and how a malicious party may compromise an electronic commerce business.

[25 Marks]

END OF EXAMINATION