

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.  
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY  
DEPARTMENT OF INFORMATION AND MEDIA TECHNOLOGY.

2011/2012 First Semester Examination, Course Name: Electronic Commerce: Code: IMT 312

**Instruction:** Attempt any four questions. **Time Allow:** 2hrs:15mins Date: 26 April, 2012

---

1. (a) Discuss in detail the significant issues that are required to implement e-commerce. (5 marks)  
(b) Describe the factors that would cause a company to continue doing business in traditional ways and avoid electronic commerce. (5 marks)  
(c) What are the impediments for e-commerce not being very successful? (5 marks)
2. (ai) What do you understand by topology of a network? (1 mark)  
(aii) Discuss in detail the various topologies in networking. (8 marks)  
(aiii) Which one is more reliable? Why? (1 mark)  
(b) Succinctly discuss any five networking devices known to you. (5 marks)
3. (ai) What is firewall? (1 mark) (aii) Why are firewalls used in an organization? (2 marks)  
(b) Write down and explain each security threat you know. (4 marks)  
(c) Write down the characteristics to select a firewall and explain them. (8 marks)
4. (a) Discuss the security services related to transactions. (4 marks)  
(b) What do you understand by cryptography, encryption and decryption? (3 marks)  
(c) Differentiate between symmetric key algorithms and the asymmetric key algorithms. (2 marks)  
(d) What are the problems with the use of public key encryption? (6 marks)
5. Discuss the following in DETAIL:  
(a) Secure socket layers (SSL) (3 marks), (b) Digital signature (2 marks), (c) Electronic wallet (2 marks)  
(d) Digital certificates (3 marks), (e) Smart card (2 marks), (f) Secure electronic transaction protocol (3 marks)
6. (a) What is the difference between B2C and B2B e-commerce? (2 marks)  
(bi) What do you understand by broadband communication? (2 marks)  
(bii) Why is important for e-commerce? (2 marks)  
(c) What is a hybrid firewall? (2 marks)  
(d) Give the full meaning of the following acronyms: DES, PGP, PEM, and RIPEM. (2 marks)  
(e) What is the need for secure transaction in e-commerce? (2 marks)  
(f) What is the principal difference between connectionless communication and connection-oriented communication? (3 marks)

Good luck.