1. (a) Differentiate between E-commerce and E-business.

(b) Mention the most important factors in successful E-commerce site designing with proper diagram.

(c) Using appropriate figure differentiate between Two-tire and Multi-tier system.

1. (a) Draw a table showing different layers of e-commerce architecture and discuss the services provided by them.

(b) State the function of Firewall in e-commerce.

(c) Explain briefly how VPN is implemented to ensure security.

1. (a) Distinguish between confidentiality, authenticity, non-repudiation and integrity of messages sent between a customer and a company in e-commerce.

(b) Describe the DES algorithm briefly giving the various steps it uses for encryption. Is it considered secure currently? If not explain why it is not secure.

(c) What is dual signature? What is the purpose of dual signature in SET protocol?

1. (a) What is digital signature? How is an e-document signed by a sender and sent to receiver? How does the recipient of a signed e-document authenticate the signature?

(b) Illustrate how the encryption and decryption works in RSA algorithm using two prime numbers 3 and 11. Apply the algorithm to a message ‘CSEJU’.

1. (a) Write down the drawbacks of traditional payment system.

(b) Enumerate the entities involved in a credit card payment system and their individual roles.

(c) Explain with a block diagram how credit card transaction is performed using SET protocol.