QUESTION BANK

13.1   Define E-commerce. What are the different types of E-commerce?

13.2   Explain B2B E-Commerce using an example of a book distributor who stocks a large number of books, which he distributes via a large network of book sellers. Assume that the distributor has stocks of books of a large number of publishers and book sellers order books as and when their stock is low. Distributors give 1 month's time to booksellers for payment.

13.3   Explain B2C E-Commerce of a customer reserving airline tickets from his home or place of work.

13.4   Explain C2C E-Commerce with an appropriate example.

13.5   List the advantages and disadvantages of E-Commerce

13.6   Explain the system architecture of E-Commerce by looking at it as a set of layers with the physical network at the bottom layer and applications at the top layer.

13.7   Define internet. Why is internet important in E-Commerce?

13.8   What do you understand by EDI? Is EDI used in B2C or B2B E-Commerce? Why is EDI important in E-Commerce?

13.9   What are two major EDI standards used in E-Commerce? Which is the standard accepted for Government transactions in India?

13.10   What is VAN? What services do VANs provide? What are the advantages and disadvantages of VAN?

13.11   If internet is to be used for EDI which mail standard is used?

13.12   If email is to be used to exchange EDI between two businesses what are the

points on which they should agree?

13.13   Why is security important in E-Commerce? What are the security issues to be taken into account while designing a security system for E-Commerce?

13.14   What is a firewall? What are the functions of a firewall?

13.15   What is packet screening? Which hardware device performs packet screening?

13.16   What is a proxy application gateway? What are the functions of this gateway?

13.17   What is a hardened firewall host? What are its functions? In what way is it different from proxy application gateway?

13.18   Given a plain text:

THIS IS A SAMPLE SENTENCE FOR ENCRYPTION.

Apply the permutation (231564) and the substitution: (letter → letter + 6) and obtain the cipher text.

13.19   What is DES? Explain what DES does when the following hexadecimal plain text is input to a DES hardware.

A1907FBCD986543201FED14E890ABCA5

13.20   What do you understand by symmetric key cryptography? What are the main advantages and disadvantages of symmetric key cryptography?

13.21   What is public key encryption? In what way is it different from private key encryption? Why is it important in E-Commerce?

13.22   What are the main differences between DES based encryption and RSA based encryption? Is it possible to combine these two systems? If so explain how?

13.23   Given two prime numbers 23 and 41 design a RSA system. Explain with an example how it works.

13.24   What is a digital signature? Why is it necessary in E-Commerce? What are the necessary conditions a hash function used in digital signature should satisfy?

13.25   Give a block diagram of a system for transmitting a signed purchase order from business 1 to business 2.

13.26   What is a certifying authority? Why is a certifying authority required in E-Commerce? How does a certifying authority performs its tasks?

13.27   What types of electronic payment systems are required in E-Commerce? Why are there different types of payment systems? Explain the necessary characteristics of each type of payment system and give an example each of where it is used.

13.28   Explain SET protocol used in credit card transactions. What is the main interesting aspect of SET protocol which gives confidence to customers transacting business using the internet?

13.29   In using SET protocol who has to keep a data base of public keys of all customers? How does the customer assured that he will not be double charged for the same item purchased?

13.30   What are the main differences between electronic cheque payment and credit card payment in E-Commerce? Explain cheque transaction protocol used in E-Commerce.

13.31   Why is a different payment system needed for small payment for internet services? Explain how one such system functions. How does the system make sure that payment is made only after information for which payment has been made is actually delivered to the customer?

13.32   What are the main characteristics of cash payment in contrast with cheque

payment? Why are governments not sympathetic to large cash transactions in

E-Commerce?

13.33   Explain how cash transactions take place in E-Commerce. What special

precautions should be taken by a bank to ensure that a customer does not double

spend the same electronic coins issued to him/her?