Q.2 a. What are the disadvantages of E-Commerce? Discuss briefly.
Answer:

Some business process may never lend themselves to E-commerce. For example, perishable foods and high cost items (such as jewellery, antiques and the like) may be difficult to inspect from a remote location, regardless of any technology that might be devised in future.

Business often calculate the returns-on-investment before committing to any new technology. This has been difficult to do with e-commerce, since the costs and benefits have been hard to quantify. Costs, which are a function of technology, can change dramatically even during short-lived e-commerce implementation projects, because the underlying technologies are changing rapidly.

Many firms have had trouble in recruiting and retaining employees with technological, design and business process skills needed to create an effective e-commerce atmosphere. Another problem facing firms that want to do business on the internet is the difficulty of integrating existing databases and transaction-processing software designed for traditional commerce into a software that enables e-commerce. Many businesses face cultural and legal obstacles in conducting e-commerce. Some consumers are still somewhat fearful of sending their credit card numbers over the internet. The legal environment in which e-commerce is conducted is full of unclear and conflicting laws. (6 marks)

b. Write down the summary of E-business transaction models along with their small description in a tabular form.

Answer:

Summary of E-Business Transaction Models

Model	Description
B2C	Sells products or services directly to consumers
B2B	Sells products or services to other businesses or brings multiple buyers and sellers together in a central marketplace.
B2G	Businesses selling to local, state and federal agencies.
C2C	Consumers sell directly to other consumers
C2B	Consumers fix price on their own, which businesses accept or decline.

(1×5= marks)

c. E-business model based on the relationship of transaction types is essentially ruled by two parameters. Discuss them briefly.

Answer:

This business model is ruled by the following two parameters:

(i) On the basis of value addition: Value addition is the addition of value to a product or service because of the opportunities that it offers on the Web. (2 marks)

(ii) On the basis of control: At the high end of control there is hierarchical control and at the low end there is no control, so that it is self-organising. Normally, the control is done through the policies of the web-site.

Based on these, nine types of transactions can be identified as listed below:

- Brokerage
- Aggregator
- Info-mediary
- Community
- Value chain
- Subscription
- Manufacturer
- Advertising
- Affiliate

These transaction types take place in a variety of ways. Moreover, any given firm may combine one or two of these as part of its web business strategy. (3 marks)

Q.3   a.   What are mobile agents? How will you get anticipated benefits by using them?

Answer:

Mobile agents are computational software processes capable of roaming Wide Area networks such as the world, interacting with foreign hosts, gathering information on behalf of their owners and coming back home, having performed the duties set by their users. These duties may range from Flight reservation to managing a telecommunications network. However, mobility is neither a necessary nor a sufficient condition for agenthood. Mobile agents are autonomous and cooperate, albeit differently from collaborative agents.

(3 marks)

The need for mobile agents includes the following anticipated benefits:

(i) Reduced communication costs

(ii) Limited local resources

(iii) Easier Co-ordination

(iv) Asynchronous computing

(v) Natural development environment

(vi) A flexible distributed computing architecture

(vii) Rethinking on design process.

(5 marks)

Any five titles can be further explained properly.

　　b. Shell Access, Dial-up Modem and VSAT are some of the important terms exclusive for ISPs. Discuss them briefly.

Answer:

Shell Access: Internet access supporting only textual interfaces, with Unix or Unix-like operating system commands. This requires "logging in" to a Unix-type user account, and then operating via textual commands or text-based menu systems. Shell access does not use the TCP/IP network protocols between the user (client) and the servers. Therefore, applications like Netscape, NFS, file sharing and Internet telephony cannot be used. (3 marks)

Dial-up Modem: As opposed to leased-line modems, this device is connected between a computer or a Data Terminal Equipment (DTE) and a conventional POTS analog telephone lines. This is used to dial into a corresponding modem at the service provider, and connect to the internet or other services (e.g. INET X.25 network). (2 marks)

V-SAT: It stands for Very Small Aperture Terminal. It is a satellite-based digital communication system usually consisting of 1.8 metre diameter satellite dishes establishing point-to-point connections, often via a V-SAT hub, a central switching system. Bandwidth can be from 2400 bps to 256 kbps. Communication delay is high, due to the two satellite hops between end points and hub latency. (3 marks)

Q.4   a. Explain the difference between traditional marketing & outline marketing.
Answer: Page Number 159, 173 of Text Book

       b. What are the major characteristics and objectives of data mining? List out
           also the various tools and techniques being used by data miners.

Answer:

Major characteristics and objectives of data mining are:

(i) Relevant data are often difficult to locate in very large databases.

(ii) In some cases, the data are consolidated in data warehouses and data marts; in others, they are kept in databases or in Internet and Intranet servers. Data mining tools help remove the information buried in corporate files or archived in public records.

(iii) "The miner" is often an end user empowered by "Data drills" and other power query tools to ask ad hoc questions and get answer quickly, with little or no programming skills.

(iv) "Striking it rich" often involves finding unexpected, valuable results.

(v) Data mining tools are easily combining combined with spreadsheets and other end user software development tools; therefore, the mined data can be easily analyzed and processed quickly.

(vi) Data mining yields five types of information: (a) association, (b) sequences, (c) classifications, (d) clusters, and (e) forecasting.

                                                 (1×6 = 6 marks)

The most well known tools and techniques being used by data miners are:

- Neural computing: It is a machine learning approach by which historical data can be examined for patterns.
- Intelligent agents: One of the most promising approaches to retrieving information from the internet or from intranet-based databases is through the use of intelligent agents.
- Association analysis: This approach uses a specialized set of algorithms that sorts through large data sets and expresses statistical rules among items.

Q.5   a. What is a denial-of service attack and how does it effect a business organisation?
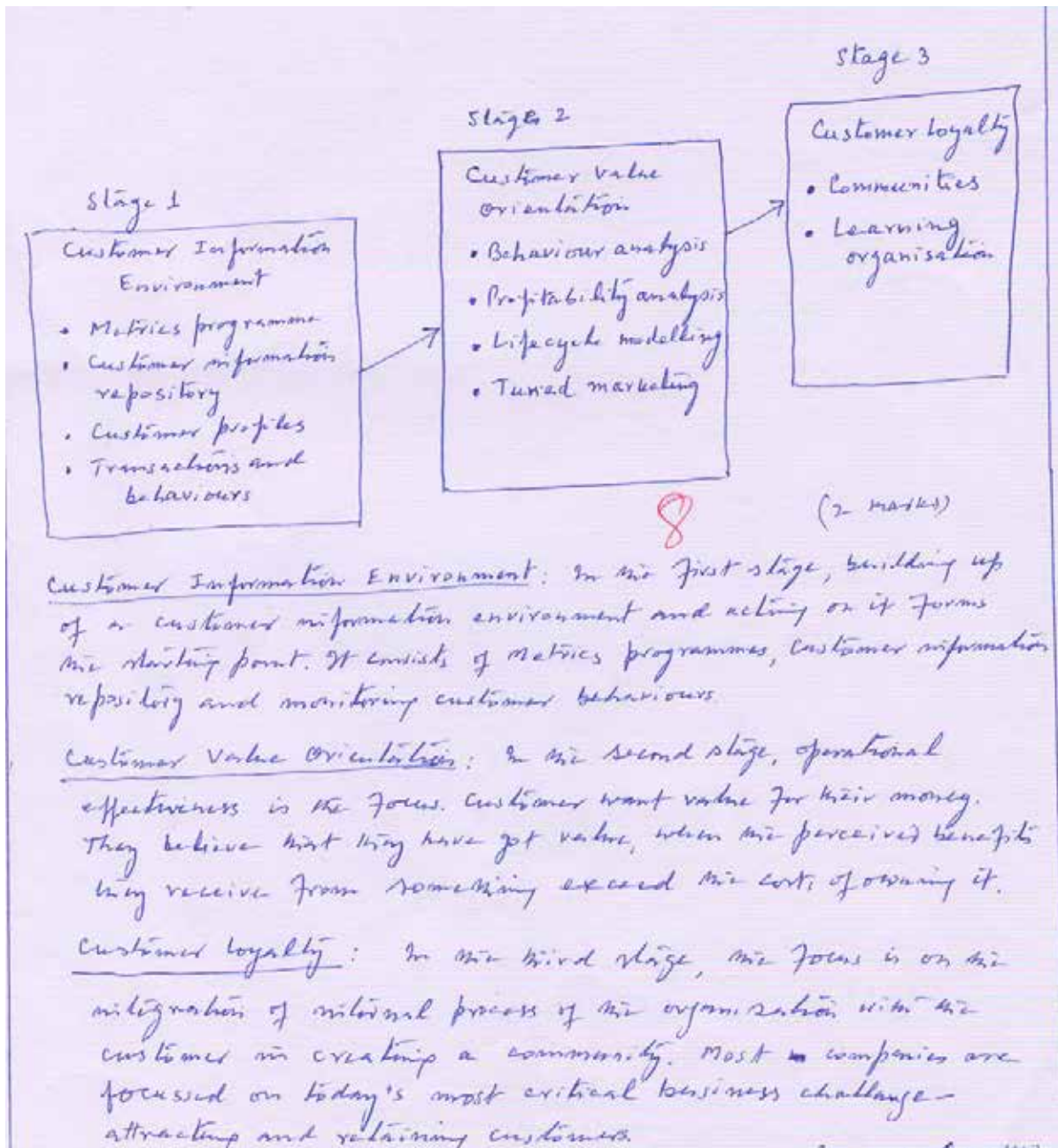
Answer: Page Number 218 of Text Book

      b. Describe the security schemes adopted in SSL and SET.

Answer: Page Number 295-296 of Text Book

Q.6   a. The strategy for e-CRM can be visualized in three stages. Explain its each stage with the help of a diagram.

Answer:

Customer Information Environment: In the first stage, building up of a customer information environment and acting on it forms the starting point. It consists of Metrics programmes, Customer information repository and monitoring customer behaviours.

Customer Value Orientation: In the second stage, operational effectiveness is the focus. Customer want value for their money. They believe that they have got value, when the perceived benefits they receive from something exceed the costs of owning it.

Customer loyalty: In the third stage, the focus is on the integration of internal process of the organisation with the customer in creating a community. Most companies are focussed on today's most critical business challenge - attracting and retaining customers.

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      b. Describe the E-supply chain architecture.
Answer: Page Number 345 of Text Book

Q.7   a. What is knowledge management? Explain with the help of diagram?
Answer: Page Number 397 of Text Book

      b. List seven dimension of E-commerce strategy with diagram. Define any four of them.
Answer: Page Number 406 of Text Book

Q.8   a. Discuss briefly about wireless applications.
Answer:

A wireless application is a software that runs on a wireless device that exchanges content over a wireless network. The actual wireless applications are distinguished from one another based

On the wireless devices, networks and application families, which discussed can be described below: (2 marks)

(i) Web phones

(ii) Wireless handhelds

(iii) Two-way pagers

(iv) Voice portals

(v) Communicating appliances

(vi) Web PCs   (1 marks)

These can be further explained. For effective answer.

     b.   What is WAP?   Write down its main benefits also.

Answer:

WAP stands for Wireless Application Protocol. It was invented and is driven by the WAP Forum – a group originally formed by Nokia, Ericsson, Motorola and Phone.com in 1997. WAP is an open specification that offers a standard method to access Internet-based content and services from wireless devices such as mobile phones and PDAs (Personal Digital Assistants). The WAP model is very similar to the traditional desktop Internet.

(4 marks)

The main benefits of WAP include:

(i) Non-proprietary method to access Internet-based content and services.

(ii) It is network independent.

(iii) It has been adopted by 95% of handset manufacturers and is being implemented by the majority of carriers.

(iv) WAP browsers can be built on top of any operating system, including PalmOS, EPOC, Windows CE, FLEXOS, OS/9, JavaOS etc.

Q.9   a.   What are the advantages & disadvantages associated with outsourcing web design?

Answer: Page Number 454 of Text Book

     b.   What are cookies? Why cookies can compromise privacy?

Answer: Page Number 497 of Text Book

TEXT BOOK

E-Commerce – An Indian Perspective, P.T. Joseph, S.J., Second Edition, PHI, 2007