

IT430 subjective 2008 , 2009 and 2010
Solved by
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IT430 subjective
2010

Question No: 31 (Marks: 2)

What you understand about Denial of services (DOS) attacks?

In this type of attack, the attacker gains access to the network and then send invalid data to network services or applications. These services or applications consequently become unable to perform their normal tasks or functions. Hence, sending a flood of data to a particular service or computer can cause it to overload or shutdown. This attack is specially used to take down websites on the internet, when repeated requests for web pages are deliberately initiated so as to choke down a web server.

Question No: 32 (Marks: 2)

How the Porter's model helps a firm to devise a plan?

Porter's Model helps a firm to identify threats to its competitive position and to devise plans including the use of IT and e-commerce to protect or enhance that position. Porter identified five forces of competitive rivalry described as under:

- 1. Threat of potential/new entrants to the sector**
- 2. Threat of substitute product or service in the existing trade**
- 3. Bargaining power of the buyers**

4. Bargaining power of the suppliers

5. Competition between existing players

Question No: 33 (Marks: 2)
Define electronic signature?

‘Electronic Signature’ means any letters, numbers, symbols, images, characters or any combination thereof in electronic form, applied to, incorporated in or associated with an electronic document, with the intention of authenticating or approving the same, in order to establish authenticity or integrity, or both”.

Question No: 34 (Marks: 2)

In SSL handshaking what is mean by Cipher Suite?

SSL supports a variety of encryption algorithm and authentication methods. The combination of algorithms and methods is called a cipher suite. When a client connects to an SSL server, the SSL handshake begins, which means that the two negotiate a cipher suite selecting the strongest suite the two have in common. Thus, the handshake establishes the protocols that will be used during the communication, selects cryptographic algorithms and authenticates the parties using digital certificates.

Question No: 35 (Marks: 3)

What do you know about interactive advertisement? Briefly explain.

It uses a combination of rich media (such as audio, video, animations) and traditional forms (such as print, TV or radio ads) in order to involve customers in advertising process to increase brand recognition.

For example, there is a famous business that uses this marketing technique. Its TV commercial induces/encourages viewers to access its website from where customers can select/download various action pictures and background music. Thus, by involving a customer in the advertising process itself, it attempts to increase its brand recognition for the customers.

Question No: 36 (Marks: 3)

How lack of trust barrier can be overcome or minimized? Discuss it briefly

lack of trust barrier can be overcome or minimized through a plan for establishing credibility of an online business is extremely crucial for its success. In this behalf, attention to the needs of the site visitors is very important while designing the web site, since it can be helpful in building trust with customers. For instance, there should be easy to find web pages that answer questions of the visitors. Note that companies with established brands can build trust for online business more quickly as compared to a new company/business without reputation, since a brand conveys expectations about how the online business would behave.

Question No: 37 (Marks: 3)

In the code given below what is meaning of "20%, *, 20%" describe briefly.

Question No: 38 (Marks: 3)

Describe 'Online Analytical Processing (OLAP)' in short?

OLAP makes use of background knowledge regarding the domain of the data being studied in order to allow the presentation of data at different levels of abstraction. It is different from data mining in the sense that it does not provide any patterns for making predictions; rather the information stored in databases can be presented/ viewed in a convenient format in case of OLAP at different levels that facilitates decision makers or managers.

Question No: 39 (Marks: 5)

Elaborate the importance of OLAP in decision making support for an organization.

Web answer idea

OLAP and web-based Decision Support Systems are by far the more popular Decision Support Systems these days. Their definition and functionality extends far beyond the scope of this paper and consequently we will not explore these systems in detail. Many other Decision Support Systems are on the market today, but to explore all of them would, for now, be a farcical objective.

Question No: 40 (Marks: 5)

Write down the list of major global issues of e-commerce.

Let us now examine some major global legal issues of e-commerce. They are listed as follows:

Territorial jurisdiction

Online contracts

Copyright in cyberspace

Domain name and trademark conflicts

Online defamation

Online privacy
Issues of taxation on internet
Cyber crimes

Question No: 31 (Marks: 2)

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Threat of potential/new entrants to the sector
Threat of substitute product or service in the existing trade
Bargaining power of the buyers
Bargaining power of the suppliers

Competition between existing players

Question No: 32 (Marks: 2)

What is meant by "1973 is the supreme law of the country"?

The Constitution of Islamic Republic of Pakistan, 1973 is the supreme law of the country, which means that every other law in Pakistan has to conform to the terms of the constitution. It contains two legislative lists at its end, that is, the Federal legislative list and Concurrent legislative list.

Question No: 33 (Marks: 2)

Why are hidden forms' fields used?

We can also use hidden forms' fields because We keep data back and forth within forms to maintain state.

Question No: 34 (Marks: 2)

Briefly explain the customer's level of loyalty to company at "Familiarity level".

Familiarity

At this stage, customers have completed several business transactions with the company and know its policies regarding refund, privacy of information, discounts etc.

Question No: 35 (Marks: 3)

Identify the different areas of study involve in e-commerce?

E-commerce is a combination of three different areas of study, namely, technology, business and law/policy.

Question No: 36 (Marks: 3)

On what basis, generally the protection under “fair use” may be sought? Doesn’t need to explain.

. Generally, fair use of a copyrighted work includes copying it for use in criticism, comment, news reporting, teaching, scholarship or research. Experts draw support from this concept of ‘fair use’ to deal with the problem of copyright over the internet. It is also argued that in cases where the author of a work has himself provided a hyperlink leading to his work, he should be regarded as giving the implied authority or license to download or make copies of his work. In such an eventuality, the issue of copyright should not arise according to an opinion.

Question No: 37 (Marks: 3)

Discuss the role and responsibilities of “Transport layer” in OSI model?

TCP (Transmission Control Protocol) or UDP (User Datagram Protocol) operate at this layer. It has two functions. It converts the data into data packets. Secondly, it is responsible for flow control of data. TCP is more reliable as it is acknowledgment based as opposed to UDP which does not use any system of acknowledgment for the delivery of data packets.

Question No: 38 (Marks: 3)

Explain the “Separation” stage of customer’s loyalty to business. Give any 2 reasons of why a customer may get into this stage. 1+2

Separation

After a period of time those conditions over which a valuable customer relationship is established might change. Customers might not be any longer satisfied with the product quality or customer service. On the other hand, a company may also find that a loyal customer is proving to be very expensive to maintain.

Thus, the parties enter into the separation stage. Note that the objective of any marketing strategy is to bring the customers quickly to the committed stage and try to hold them there as long as possible.

Question No: 39 (Marks: 5)

What do you perceive by Value Added Network? Explain its advantages too with reference to EDI. (2+3)

Advantages of VAN

Two big advantages of using a VAN in EDI are time independence and protocol independence.

Time independence means that the sending and receipt of the interchange or messages can be carried out at the convenience of the users involved. Thus, they are not required to be connected with each other at the same time.

Protocol independence means that interchanges are re-enveloped with the transmission protocol appropriate to the recipient when they are retrieved from the postbox by the VAN. Thus, a VAN can provide protocol compatibility between the sender and the recipient, wherever that is missing.

Question No: 40 (Marks: 5)

What are the four guiding principles to form the basis of any privacy legislation?

Experts have highlighted four guiding principles to form the basis of any privacy Legislation. These are as follows:

Collected data may be used for improved customer service;

Sharing of personal data with outside firms/persons should not be allowed unless the customer consents to that;

customers should have the right to receive information about what type of data has been collected from them and in what manner has it been used;

Customers should have the right to ask for the deletion of any of their data collected by the company.

Question No: 31 (Marks: 2)

What is meant by EDI?

ELECTRONIC DATA INTERCHANGE (EDI)

Question No: 32 (Marks: 2)

What do we mean by “Affiliation” between two parties? Explain shortly.

An affiliate program is an agreement between two parties that one will pay the other a commission based on a specified customer action. It is not a strategic union as is partnership. Rather, it is for limited purpose and time. Banner advertising is the example of an affiliate program.

Question No: 33 (Marks: 2)

Write HTML code for two input fields, one for Login Name and other for Password.

Question No: 34 (Marks: 2)

What term/matters does the concurrent legislative list sets out according to (ETO) 2002?

In relation to items contained in the Concurrent Legislative List of the Constitution of the Islamic Republic of Pakistan, 1973, for which a Federal law is in force, the Federal Legislature or Federal Government, and, in all other cases, respective Provincial Legislature or Provincial Government;

Question No: 35 (Marks: 3)

Describe the importance of Customer Relationship Management (CRM) in current scenario.

One major goal of CRM is to establish a long-lasting relationship between a company and its customers. Good customer services can help in building a sense of loyalty towards company and its products or services. Experts have pointed out five stages of loyalty as customer relationships develop over a period of time

1. Awareness
2. Exploration
3. Familiarity
4. Commitment
5. Separation

Question No: 36 (Marks: 3)

In ETO, what are functions of **Accredited Certification Service Provider**?

Accredited Certification Service Provider’ means a Certification Service Provider accredited under this Ordinance to issue certificates for the use of its cryptography services”.

Question No: 37 (Marks: 3)

How many legislative list(s) is(are) in Constitution of Islamic Republic of Pakistan at end?

It contains two legislative lists at its end, that is, the Federal legislative list and Concurrent legislative list. The federal legislative list sets out those items/subjects on which only the federal legislature can make laws such as the subject related to defense of Pakistan and armed forces etc.

On the other hand, matters contained in concurrent legislative list are those on which both the federal and provincial legislature can enact/make laws, such as the subject related to marriage and divorce etc

Question No: 38 (Marks: 3)

Write short note on Packet Filter Firewall?

Packet filter firewall

It uses a set of rules to determine whether outgoing or incoming data packets are allowed to pass through the firewall.

For example, we can, as a rule, specify IP addresses of sending devices such that packets from these IP addresses are not allowed to enter the network. The Firewall would stop them from entering. A packet filter firewall is the simplest type of firewalls which operates at data link and network layers of the OSI model.

Question No: 39 (Marks: 5)

Discuss briefly how companies are getting competitive advantage over the other organizations through differentiation and focus?

Differentiation

Differentiation means that your product/service has certain quality that makes it more attractive than the one offered by your competitor, despite the price of your competitor's product/service is somewhat lower. For instance, you can beat your competitors for the reason that the air conditioner produced by your company is unique as it does not produce noise while in operation, whereas this feature is missing in the air conditioners produced by your competitors.

Focus

Focus strategy is defined as concentration on a single aspect of the market. That single aspect can be a particular market segment or market area or product type. For example, if my competitors are focusing on different market areas, I may, on the other hand, plan that I can be more profitable by concentrating on one particular area. It may be a particular province or a city etc. where I may have a better distribution channel.

Question No: 40 (Marks: 5)

Write a short note on the following Global legal issues (Marks: 2.5+2.5=5)

1. Territorial Jurisdiction
2. Online contracts

Territorial Jurisdiction

There are different forms of jurisdiction. Territorial jurisdiction refers to the competence of a court to decide a case on the basis of certain geographical area/territory. So, if a dispute arises in Karachi, the courts in Karachi would only have territorial jurisdiction, and the case cannot be filed in Islamabad or Lahore. Ordinarily, territorial jurisdiction lies where the defendant resides or carries on business or the cause of action has

wholly or partly arisen or the immovable property is situated (in case the matter relates to land etc.).

Online contracts

In the physical world three elements must be satisfied in order to make a valid contract, namely, offer, acceptance and consideration. The same three elements must also be present in case of a valid online contract. An offer is a commitment with certain terms made to another party such as willingness to buy or sell certain product.

A contract is formed when a party accepts the offer of another party for consideration. Consideration is the agreed exchange of something valuable for both the parties such as money, property or services.

Question No: 31 (Marks: 2)

What is Data Mining?

Data Mining can be defined as the task of discovering interesting patterns from large amounts of data, where the data can be stored in databases, data warehouses, or other information repositories.

Question No: 32 (Marks: 2)

What is the purpose of FRAMESET tag?

Frameset page divides the browser window into a set of frames and defines the size of each frame. It also specifies which content pages are displayed in which frame. It has no body section (no body tag). Content pages are just regular HTML pages.

Question No: 33 (Marks: 2)

What do we mean by "Free-Trial" promotion technique?

Free-trials

Customers can sign up for a free service. For example, they can be allowed to download software for certain days free of cost on trial basis before buying it.

Question No: 34 (Marks: 2)

What is UNCITRAL?

Most of the countries have, by now, made laws providing recognition to electronic documents and electronic signatures. They have basically followed a model law on e-commerce proposed by a U.N. body called UNCITRAL (United Nations Commission on International Trade Law) in 1996.

Question No: 35 (Marks: 3)

Write precisely about the 4th stage of planning cycle?

In 4th stage of planning cycle, you can conduct surveys, collect information and receive feedback from different groups of people so that you have solid input from people coming from a variety of background. Sometimes, you have to entirely give up a particular strategy you followed and formulate a new strategy or set of strategies in light of the company's main objective or its mission.

Question No: 36 (Marks: 3)

Discuss the role and responsibilities of "Transport layer" in OSI model?

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Question No: 37 (Marks: 3)

How lack of trust barrier can be overcome or minimized? Discuss it briefly

Lack of trust barrier can be overcome or minimized through a plan for establishing credibility of an online business is extremely crucial for its success. In this behalf, attention to the needs of the site visitors is very important while designing the web site, since it can be helpful in building trust with customers. For instance, there should be easy to find web pages that answer questions of the visitors. Note that companies with established brands can build trust for online business more quickly as compared to a new company/business without reputation, since a brand conveys expectations about how the online business would behave

Question No: 38 (Marks: 3)

Write the names of companies who were helper in developing Secure Electronic Transaction.

Visa

MasterCard

Netscape

Microsoft.

Question No: 39 (Marks: 5)

Differentiate between Cyber squatting and concurrent use with example.

Cyber squatting

The act of intentionally registering domain names containing trademarks/trade names of prominent companies to later blackmail or demand ransom from those companies is called cyber squatting.

Example

Assume there is a firm 'Glory Enterprise' and it wants to have its web site. It also wants to have the word 'glory' as a part of its domain name because for years it has been recognized in the physical world through this word. However, at the time of registration of its domain name it finds that a person Mr. 'A' who has nothing to do with the business of the firm or the word 'glory' has already registered a domain name containing this word as a part of it. Since there cannot be two similar domain names, the firm is forced to request Mr. 'A' to transfer that domain name to it. In response, if Mr. 'A' blackmails or claims ransom from the said firm, he would be said to have committed cyber squatting.

concurrent use

This problem arises when two organizations have apparently legitimate claim to use the same domain name but cannot do so due to the uniqueness of domain names.

Example

Suppose, there is a company manufacturing electronic goods and another company selling French fries. Under the traditional trade mark law both these companies can have the same trade mark/trade name such as 'frys'. The problem arises when both apply for the registration of a domain name containing the word 'frys'. Here, both are legitimate claimants of this domain name but due to the element of uniqueness of domain names only one of them can be assigned the desired domain name.

Question No: 40 (Marks: 5)

Explain 'Confidence' and 'Support' as two measures of Association?

'Confidence' is a measure of how often the relationship holds true e.g, what percentage of time did people who bought milk also bought eggs. Mathematically, they can be expressed as follows if we take the example of eggs and milk:

Confidence = Transactions (eggs+milk)

Transactions (eggs or milk or both)

In case no. of transactions involving eggs and milk are 25 and those involving eggs or milk or both are 75 then confidence is

$$25/75*100=33.3\%$$

Support means what is the percentage of two items occurring together overall.

Mathematically, they can be expressed as follows if we take the example of eggs and milk:

Support = Transactions (eggs+milk)

Total no. of transactions

In case no. of transactions involving eggs and milk are 10 and total no. of transactions in a day are 50 then support is $10/50*100 = 20\%$

Question No: 31 (Marks: 2)

What is Competition between existing players?.

Competition within businesses to get more customers and trade at a price that produces a satisfactory profit. If there are lots of players of the same size, capacity and strategy having little difference between their goods, then there is fierce competition among them as regards the price of the goods.

Question No: 32 (Marks: 2)

What is the use of CRC in communication over the network?

Cyclical Redundancy Check (CRC), help us to confirm integrity of data frames.

Question No: 33 (Marks: 2)

What is the Key difference between the B2C and B2B?

B2C stands for Business-to-Consumer and deals between electronic markets to consumer (end user) directly e.g. Amazon.com, while B2B is Business-to-Business and make bridge between two or more organization.

Question No: 34 (Marks: 2)

What is meant by online defamation?

A defamatory statement is a false statement that injures the reputation of on another company. In cases of defamation the appeal taken by the defendant is that his statement is not false. Rather, it is a 'fair comment'. In case defamation is done using the internet, it is termed as online defamation

Question No: 35 (Marks: 3)

In ETO, what are functions of **Accredited Certification Service Provider?**

Accredited Certification Service Provider means a Certification Service Provider accredited under this Ordinance to issue certificates for the use of its cryptography services.

Question No: 36 (Marks: 3)

SSL is better than SET. Do you agree with this statement? Justify your answer.

(1+2)

Question No: 37 (Marks: 3)

What is meant by connectivity media in networking? What are two different options to connect computers on a network? 1+2

Question No: 38 (Marks: 3)

Write down the principles of private legislation?

Following are the principles:

- **A private bill should only be passed at the explicit request of the persons who are to benefit from the legislation.**
- **Pertinent information regarding a private bill should be made available to all interested persons.**
- **All persons or bodies affected by a private bill should be heard and the need for the bill demonstrated.**
- **The financial burden of considering a bill for the benefit of private interests should not be borne solely by the public treasury.**

Question No: 39 (Marks: 5)

What is cyber squatting and its purpose? Give its example.

The act of deliberately registering domain names having trademarks of famous companies to later blackmail or demand payment from those companies is called cyber squatting. For example; Assume there is a firm 'Nassir Enterprise' and it wants to have its web site. It also wants to have the word 'Nassir' as a part of its domain name because for years it has been recognized in the market through this word. However, at the time of registration of its domain name it finds that a person Mr. 'A' who has nothing to do with the business of the firm or the word 'Nassir' has already registered a domain name containing this word as a part of it. Since there cannot be two similar domain names, the firm is forced to request Mr. 'A' to transfer that domain name to it. In response, if Mr. 'A' blackmails or claims ransom from the said firm, he would be said to have committed cyber squatting.

Question No: 40 (Marks: 5)

How much benefits you can derive from E-banking? Brief shortly each.

Followings are some advantages getting from E-banking:

- **Get current account balances at any time**
We can check our accounts balances from anywhere of world, no need to go bank.
 - **Obtain credit card statements**
- **If you want reconcile your statements you can get easily from it.**
 - **Pay utility bills**
- **Paying bills by credit card give much relief to users, no need of stand in queue for long time.**
 - **Download account information**
- **Any info you want about your account, get from online bank accounts**
 - **Transfer money between accounts**

Money transferring is not headache, no need of stand in queue for long time.

- **Send e-mail to your bank**

It's no easier to live in contact with your bank.

- **Handle your finances from**

You can manage finances from it.

Question No: 31 (Marks: 1)

Name any 3 E-Business models?

- 1. Storefront Model**
- 2. Auction Model**
- 3. Online Banking**

Question No: 32 (Marks: 1)

'Human resources' is one of the areas in a strategic business unit **according to** Michael Porter. List what kind of activities is performed in this area?

'Human resources' refer to the activities that coordinate management of employees, e.g, recruiting, hiring, compensation and benefits etc.

Question No: 33 (Marks: 2)

What do we mean by the anonymity in E-Cash Payment system?

Anonymity in e-cash system means that the identity of the client/buyer is not disclosed.

Question No: 34 (Marks: 2)

Do you agree that Customization is one of the role of e-commerce in Competitive Strategy. Discuss briefly

Customization

With the help of EC, customer data can be gathered and analyzing it customers can be served in a better manner according to their needs. One can, thus, implement differentiation and focus strategy.

Question No: 35 (Marks: 3)

What is(are) global issue(s) of Internet Taxation in E-commerce? Give precise answer.

Question No: 36 (Marks: 3)

Explain the “Separation” stage of customer’s loyalty to business. Give any 2 reasons of why a customer may get into this stage. 1+2

After a period of time those conditions over which a valuable customer relationship is established might change. Customers might not be any longer satisfied with the product quality or customer service. On the other hand, a company may also find that a loyal customer is proving to be very expensive to maintain. Thus, the parties enter into the separation stage.

Question No: 37 (Marks: 3)

What is e-business storefront model?

Storefront Model

It represents basic form of e-commerce where buyers and sellers interact directly. Merchants need to organize online catalog of products, take orders through their websites, accept payments in a secure environment and send items to the customers. They can also store and manage customer data in databases. A storefront model uses the shopping cart technology which allows customers to accumulate items they want to buy during shopping. This is quite popular in B2C transactions.

Question No: 38 (Marks: 5)

Differentiate Electronic signature vs paper based signature

Paper signature less reliable than electronic signature, because electronic signature is not ordinarily possible to copy but it is possible in case of paper signatures. **Digital or electronic signatures enable the replacement of slow and expensive paper-based approval processes with fast, low-cost, and fully digital ones.**

Question No: 39 (Marks: 5)

What do you perceive by Value Added Network? Explain its advantages too with reference to EDI. (2+3)

Advantages of VAN

Two big advantages of using a VAN in EDI are time independence and protocol independence. Time independence means that the sending and receipt of the interchange or messages can be carried out at the convenience of the users involved. Thus, they are not required to be connected with each other at the same time. Protocol independence means that interchanges are re-enveloped with the transmission protocol appropriate to the recipient when they are retrieved from the postbox by the VAN. Thus, a VAN can provide protocol compatibility between the sender and the recipient, wherever that is missing.

Question No: 40 (Marks: 10)

Take a product or service and implement the Micheal Porter' model of value chain with respect to its primary and secondary activities.

In 1985 Michael Porter gave the idea of value chains in his famous book "Competitive advantage". A value chain is a way of organizing activities that each strategic business unit undertakes to design, produce, promote, market, deliver and support the products or services it sells.

(primary and secondary)

'Identify customers' refer to those activities which try to find new customers and ways to serve better to the existing ones, e.g, surveys and market research;

'Design' activities take a product form concept stage to manufacturing stage. They include concept research, engineering, drawings preparation, test marketing etc.

'Purchase materials and supplies' activities relate to procurement of material, vendor selection/qualification, negotiating supply contracts, monitoring quality and timely delivery etc.

'Manufacture product or create service' activities relate to transformation of materials and labor into finished products, e.g, fabricating, assembling, packaging etc.

'Market and sell' activities give buyers a way to purchase and provide inducement for them to do so, e.g, advertising, promotions, managing salespersons, monitoring distribution channel, pricing etc.

'Deliver' activities relate to storage, distribution and shipment of final product, e.g, warehousing, selecting shippers, material handling, timely delivery to customers etc.

'Provide after sales service and support' refer to those activities that aim at promoting a continuing relationship with customers, e.g, installing, testing, repairing, maintaining a product, fulfilling warranties etc.

Note that left to right flow does not mean a strict time sequence for these activities. For example, marketing activity can take place before purchasing materials.

Importance of each primary activity depends on the product/service and the type of customers.

For example, for certain type of businesses/products manufacturing activities are more critical and for others marketing activities may be more important.

Support activities provide infrastructure for a business unit's primary activities as indicated in Fig. 1 above. Following are the support activities:

'Finance and administration' activities relate to accounting, paying bills, borrowing funds and complying with government regulations etc.

'Human resources' refer to the activities that coordinate management of employees, e.g, recruiting, hiring, compensation and benefits etc.

'Technology development' relates to activities which help improve product/service that a business is selling and also help improve processes in every primary activity, e.g, fields tests, maintenance of procedures, process improvement studies etc.

Question No: 41 (Marks: 10)

What are the advantages and disadvantages of offline and online catalogues?

5+5

Online or electronic catalogs

Advantages

Easy to update product information
Able to integrate with the purchasing process
Good search and comparison capabilities
Able to provide timely, up-to-date product information
Can provide broad range of product information
Possibility of adding voice and motion pictures
Cost savings
Easy to customize

Disadvantages

Difficult to develop catalogues
Large fixed cost if used for small no. of products
Need for customer skill to deal with computers and browsers

Question No: 31 (Marks: 2)

List and explain the name of protocol used at "Network" layer of OSI model?

Network layer

It is responsible for providing IP addresses on data packets using IP protocol. Routing Information Protocol (RIP) also operates here which enables routers to build their routing table. Another protocol, Address Resolution Protocol (ARP) is also designed to operate at network layer.

Question No: 32 (Marks: 2)

What do we mean by "Affiliation" between two parties? Explain shortly.

Affiliate Programs

An affiliate program is an agreement between two parties that one will pay the other a commission based on a specified customer action. It is not a strategic union as is

partnership. Rather, it is for limited purpose and time. Banner advertising is the example of an affiliate program.

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Customization

With the help of EC, customer data can be gathered and analyzing it customers can be served in a better manner according to their needs. One can, thus, implement differentiation and focus strategy.

Question No: 34 (Marks: 2)

Write down the hierarchy of courts with reference to the global legal issues of e-commerce?

Supreme court

High court

District/session court

Civil court s/courts of magistrates

Question No: 35 (Marks: 3)

How Technology development is supporting activities in value Chain.

'Technology development' relates to activities which help improve product/service that a business is selling and also help improve processes in every primary activity, e.g, fields tests, maintenance of procedures, process improvement studies etc.

Question No: 36 (Marks: 3)

What is e-business storefront model?

Storefront Model

It represents basic form of e-commerce where buyers and sellers interact directly. Merchants need to organize online catalog of products, take orders through their websites, accept payments in a secure environment and send items to the customers. They can also store and manage customer data in databases. A storefront model uses the shopping cart technology which allows customers to accumulate items they want to buy during shopping. This is quite popular in B2C transactions.

Question No: 37 (Marks: 3)

What are three different modes of transmission? Shortly explain each.

Three modes of communication are simplex, half-duplex and full-duplex. Simplex means communication in one direction only. Half-duplex means communication in two directions but one party can send data at a time.

Full-duplex means communication in two directions while both parties are able to send data simultaneously. It also places special checkpoints on data packets to trace any lost packets

Question No: 38 (Marks: 3)

What type of issues civil and criminal laws deals with?

Civil law deals with the private rights of the parties, whereas the object of criminal law is to punish the wrong-doer

Question No: 39 (Marks: 5)

What is supply chain management? Write down advantages and disadvantage of using internet technologies in Supply chain.

The process of taking active role in working with suppliers to improve products and processes is called supply chain management

Internet technologies and supply chain

Internet is a very quick and effective tool of communication. On the other hand, communication is also a very critical element in supply chain management. Using internet technology:

Suppliers can share any information about changes in the customer demand;

Suppliers can have immediate notice of any changes in product design;

Drawings/specifications of a product can be quickly provided to the suppliers and vice versa;

Processing speed of a transaction can be increased;

Cost of handling a transaction can be reduced;

Chances of errors in entering transaction data are reduced;

Probably, the only disadvantage of using internet technology in a supply chain is that sometimes it may prove to be costly. However, in ultimate analysis, the advantages override the cost factor.

With the help of supply chain management software, one can not only manage the internal processes but also processes of other members of the supply chain. Therefore, it can be predicted that when and how much of certain product would need to be produced.

Question No: 40 (Marks: 5)

Under Section 25, each certification service provider shall prepare a Certification Practice Statement (CPS).

What you understand by CPS?

Under Section 25, each certification service provider shall prepare a Certification Practice Statement (CPS) as prescribed by the regulations of the Certification Council. CPS would be a policy document of the certification service provider, which would be filed along with the application for grant of accreditation certificate. A copy of the certification practice statement shall be maintained at the office of the Certification Council and shall be open to public inspection. Subject to any regulations made by the Council, a CPS would normally include information for persons adversely affected by a wrong/false certificate, the extent of liability, policy about suspension or revocation of certificates etc.

2009 papers subjective

Question No: 31 (Marks: 1)

What should be the length range in bits of a message digest?

A message digest is a single large number typically between 128 to 256 bits in length.

Question No: 32 (Marks: 1)

Just write down the name of Elements of Branding?

Differentiation

Relevance

Perceived Value

Question No: 33 (Marks: 2)

What is civil law? Give precise answer.

Civil law deals with the private rights of the parties, whereas the object of criminal law is to punish the wrong-doer. Civil wrongs such as breach of contract are deemed to violate only the rights of individuals and not the society in general.

Question No: 34 (Marks: 2)

What do we mean by “Affiliation” between two parties? Explain shortly.

Affiliation:

Generally, affiliation exists when one business controls or has the power to control another or when a third party (or parties) controls or has the power to control both businesses. Control may arise through ownership, management, or other relationships or interactions between the parties. Merger is an example of affiliation.

Question No: 35 (Marks: 3)**What is concept of “fair use” in copyright law?**

There is a concept of ‘fair use’ or ‘fair dealing’ in copyright law that provides legitimate exceptions to copyright violation. Generally, fair use of a copyrighted work includes copying it for use in criticism, comment, news reporting, teaching, scholarship or research. Experts draw support from this concept of ‘fair use’ to deal with the problem of copyright over the internet. It is also argued that in cases where the author of a work has himself provided a hyperlink leading to his work, he should be regarded as giving the implied authority or license to download or make copies of his work. In such an eventuality, the issue of copyright should not arise according to an opinion.

Question No: 36 (Marks: 3)

Digital signatures are considered more reliable than paper signatures. Do you agree with this statement? Briefly justify your answer. 1+2

Question No: 37 (Marks: 3)

What is ERP? Briefly explain its use in an organization? (1 + 2)

ERP is an approach that attempts to integrate all departments and functions across a company onto a single computer system that can serve all those different departments' particular needs. For example, finance, manufacturing and the warehouse department of a company may have their own software to perform tasks specific to each one of them. However, each software can be linked together so that a customer service representative can see the credit rating of a customer from finance module, warehouse information from **warehouse module, and shipment information from the shipment module. SAP is an example of ERP** software. ERP is complex. It is not intended for public consumption as proper integration of ERP with ecommerce applications is still a major problem.

Question No: 38 (Marks: 5)

What do you perceive by Value Added Network? Explain its advantages too with reference to EDI. (2+3)

Value added networks are third party networks that provide services to execute authorized transactions with valid trading partners using EDI. Each VAN has a centralized computer system that maintains two files for each user, that is,

Postbox: where outgoing messages are placed, and

Mailbox: where incoming messages can be picked up.

Advantages:

Two big advantages of using a VAN in EDI are time independence and protocol independence. Time independence means that the sending and receipt of the interchange or messages can be carried out at the convenience of the users involved. Thus, they are not required to be connected with each other at the same time. Protocol independence means that interchanges are re-enveloped with the transmission protocol appropriate to the recipient when they are retrieved from the postbox by the VAN. Thus, a VAN can provide protocol compatibility between the sender and the recipient, wherever that is missing.

Question No: 39 (Marks: 5)

What is ACH? What is its role in Virtual PIN system? 2+3

ACH stands for Automated Clearing House. A house through which the bank of payee clears the check with the help of traditional automated clearing house.

Role of ACH in Virtual PIN System:

A deposit request encrypted with bank's public key accompanies the payment information. E-cash bank maintains a database of spent coins. On receipt it checks whether the coin is valid and whether it has already been spent or not (to prevent double spending) by referring to its database. If the coins are valid the bank credits the merchant's account. Thus, if the client has sent valid coins worth \$10 for payment to the merchant, and the merchant already has \$90 in his account then an amount of \$ 10 would be added in his account making it \$ 100. Later, the merchant can request the e-cash bank to transfer this amount in his account with the acquirer bank. This can be done through ACH and the merchant can physically withdraw the money from the acquirer bank.

Question No: 40 (Marks: 10)

What is data warehousing? What are its main tasks? What is its importance for an organization?

The primary concept behind data warehousing is that the data stored for business analysis can most effectively be accessed by separating it from the data in the operational systems. A data warehouse, therefore, is a collection of data gathered from one or more data repositories to create a new, central database. For example a hospital may create a data warehouse by extracting the operational data it has accumulated concerning patient information, lab results, drug use, length of stay, disease state, etc,. Data Warehousing is not just the data in the warehouse, but also the architecture and tools to collect, query, analyze and present information.

Question No: 41 (Marks: 10)

Precisely explain the steps of "Knowledge discovery from database" in order of their occurrence.

Answer: Knowledge discovery process include Data cleaning, Data selection, Data transformation, Data Mining, Data integration, Pattern evaluation & knowledge presentation.

Explanation of each step:

1-Data cleaning

Data cleaning means that missing values should be provided in different fields/columns wherever needed and any impossible or erroneous values should be substituted by correct/reasonable ones. For example if the age of a person is typed as 1000 years in the column 'age' then an average age value can be put in its place.

2-Data selection

Where there are quite a few erroneous or missing values in a row, then that row can be discarded/deleted altogether. This process is called data selection.

3-Data transformation

In data transformation, the data from all different sources is converted into the same format. For example, date typed under a column should be in the same format in the entire data collected through different sources.

4-Data integration

In data integration, data from all the sources is assembled or integrated into one and housed in the data warehouse.

5-Data Mining

Now, this cleaned, transformed, selected and integrated data is fed to the data mining tool from a data warehouse for data mining purpose.

6-Pattern evaluation & knowledge presentation

The results/ patterns are evaluated by managers and useful knowledge is thus gained. Note that almost 80% of the total time used in a knowledge discovery process is spent on just making the data fit for mining, that is, data cleaning, data transformation, data selection etc.

Question No: 31 (Marks: 1)

What is stand for WIPO?

World Intellectual Property Organization

Question No: 32 (Marks: 1)

Name any 3 E-Business models?

1-Storfront Model

2-Auction Model

3-Onlien Banking

Question No: 33 (Marks: 2)

What is the basic purpose of using hash function in communication?

A hash function is applied on the message to get the message digest.

Question No: 34 (Marks: 2)

What is Competition between existing players ?.

If there are many players having same size and stretagy but having different qualities in product and services. Then there is true competition between them regarding price of that product or service.

Question No: 35 (Marks: 3)

On what basis, generally the protection under “fair use” may be sought? Doesn't need to explain.

Nature of use: The work should be used only for non profitable and for education purposes.

Nature Of Work: The copied work is effectively covered under fair use as compaired to that of some new or creative work

Extent of the work copied: The extent of work to be copied under fair use should be small so that court take some favourable steps to accused.

Question No: 36 (Marks: 3)

In Virtual PIN Payment system, merchant side is less secure than buyer side. Do you agree with this statement? Justify your answer.

1+2

Yes , I am agree with this statement that marchant side is less secure than buyer side because marchant send the product before payment. So there is threat of non payment from buyer side.

Question No: 37 (Marks: 3)

What are the disadvantages of Data Mining? (1+1+1)

- **Privacy Issues**
- **Security issues**
- **Maintanence Problem**

Question No: 38 (Marks: 5)

Describe the advantages of E-Business in detail.

Personalized service:

product , place , promotion and price are the 4 P`s of marketing mix. Now Personalization is the 5th P introduced in E-Business. The bahavioural information about customers can be added in data base and then can be utilized to by teh E-Commerce sites to analyze the needs of taht particular customer. So, in this way personalized service can be provided to customer.

High-quality customer service

With the help of feed back of potential customers online businesses can improve the quality of their products according to the needs and demands of thier customers. So it will improve the customer services of E-Buiseness.

No inventory cost

In case of E-Business we dont need to have any physical place to start business. In this way it reduces overheads and inventory costs. An onilne busines can take orders from customers with out bearing teh inventory cost like offline traditional businesses.

Worldwide reach of your business:

In E-Business there is a chance to extend your business throughout the world. So, global reach is possible in E-Business.

Electronic catalogues

Electronic catalogue is used in online business have many advantages over paper catalogues.

Bulk transactions

Due to no limitations on collecting, carrying and packaging goods we can order bulk transactions during even one visit at online shops.

Improved supply chain management

Suppliers and manufacturer are the active members of supply chain members. They are effective addition in E-Business.

Question No: 39 (Marks: 5)

Elaborate the importance of OLAP in decision making support for an organization.

OLAP makes use of background knowledge regarding the domain of the data being studied. It is different from data mining as it does not provide patterns for any predictions. It allows the data being studied to present at different level of abstraction. Information stored in the data base can be viewed and reviewed conveniently in any format. In case of OLAP at different levels facilitate managers and decision makers in making decisions. OLAP uses different tools namely, drill down, roll up and slice and dice etc. By using drill down we can further dig into the data for receiving more information which is specific. Roll up works opposite to the drill down, it is used to sum up the information in a particular dimension to show the results.

Question No: 40 (Marks: 10)

What is Porter's 5 forces model? Discuss briefly 5 forces with its purpose.

Porter's model helps a firm to identify threats to its competitive position and to devise plans accordingly which includes uses of IT and E-commerce to protect or enhance his competitive position.

Following are the 5 forces models of Porter.

1- Threats of new potential entrants to the sector

This threat relates to the opportunity that how easily a company having different products and services can enter into the a given trade sector. How efficiently it remove the barriers like IT, Capital and skills. For example to start online banking you need not to

2- Threats of substitute product or service in existing trade

3- Bargaining power of the buyers

4- Bargaining power of the suppliers

5- Competition between existing players

Question No: 41 (Marks: 10)

What are the advantages and disadvantages of offline and online catalogues?

5+5

Online catalogues vs. Paper catalogues

Paper catalogs

Advantages

Easy to create a catalog without high technology

Reader is able to look at the catalog without computer system

More portable than electronic catalog

Disadvantages

Difficult to update changes in the product information

Only limited number of products can be displayed

Online or electronic catalogs

Advantages

Easy to update product information

Able to integrate with the purchasing process

Good search and comparison capabilities

Able to provide timely, up-to-date product information

Can provide broad range of product information

Possibility of adding voice and motion pictures

Cost savings

Easy to customize

Question No: 31 (Marks: 1)

What is a basic purpose of payment gateway in SET transactions? Explain shortly.

Answer:

The role of payment gateway is to connect entities on the internet with those which are not on the internet such as the electronic network of banks. Payment gateway provides the security of data transmission to/from the acquirer bank..

Question No: 32 (Marks: 1)

‘Provide after sales service and support’ is one of the areas in a strategic business unit according to Michael Porter. List what kind of activities is performed in this area?

Answer:

1-Installing

2-Testing,

3-Repairing

4-Maintaining a product

5-Fulfilling

6-Warranties

Question No: 33 (Marks: 2)

What do we mean by “Affiliation” between two parties? Explain shortly.

Affiliation:

Generally, affiliation exists when one business controls or has the power to control another or when a third party (or parties) controls or has the power to control both businesses. Control may arise through ownership, management, or other relationships or interactions between the parties. Merger is an example of affiliation.

Question No: 34 (Marks: 2)

Discuss briefly how a software developer who releases annual updates of his software can reduce the price of his product and increase sales revenue in an E-Commerce environment.

Question No: 35 (Marks: 3)

Under Section 21 of the ETO, the funds of the Certification Council shall comprise of:?

Answer: Under Section 20:

Grants from the Federal Government;

Fee for grant and renewal of accreditation certificate; and

Fee, not exceeding ten Rupees, for every certificate deposited in the repository; fines.”

Question No: 36 (Marks: 3)

What is business promotion? Briefly explain any two methods of business promotion. 1+2

Answer:

E-business promotions can attract visitors to your site and induce them to purchase.

Promotional messages can be sent both online and offline.

Discounts

Discount advertisements through magazines, newspapers, web sites etc. can attract new and repeat customers.

Coupons

Online coupons are placed on certain popular sites to attract customers for online shopping. They can use these coupons for shopping through specific web sites.

Question No: 37 (Marks: 3)

How does the client purchase from merchant using E-Cash Payment system? Show the payment request format.

Question No: 38 (Marks: 5)

Explain the advantages of E-business regarding today’s scenario.

Cost Effective Marketing and Promotions: Using the web to market products guarantees worldwide reach at a nominal price. Advertising techniques like pay per click advertising ensure that the advertiser only pays for the advertisements that are actually viewed.

Developing a Competitive Strategy: Firms need to have a competitive strategy in order to ensure a competitive advantage. Without an effective strategy, they will find it impossible to maintain the advantage and earn profits. The strategy, that the firms can pursue, can be a cost strategy or a differentiation strategy

Better Customer Service: E-Business has resulted in improved customer service. Many a times, on visiting a website, the customer is greeted by a pop-up chat window. Readily available customer service may help in encouraging the customer to know more about the product or service. Moreover, payments can be made online, products can be shipped to the customer without the customer having to leave the house.

Bulk transactions

One can do bulk transactions during one visit to an e-shop, since there is no limitation of collecting, packaging or carrying goods in contrast to shopping from a traditional offline shop.

Question No: 39 (Marks: 5)

Elaborate the importance of OLAP in decision making support for an organization.

Answer: Online Analytical Processing (OLAP) uses knowledge for the purpose of presenting data at different levels of abstraction. It is different from data mining as it does not help in making predictions. But data can be viewed and reviewed in many different ways for decision making purpose. The result is showed in form of a data cube.

Question No: 31 (Marks: 1)

What stands for CRM?

CRM stands for costumer relationship management.

Question No: 32 (Marks: 1)

What are the three attacks on symmetric key algorithms? Write names only.

1. Key Search Attacks
2. Cryptanalysis
3. System-based Attacks

Question No: 33 (Marks: 2)

What is ONLINE BANKING?

Online banking provides services to the customers through internet including services of electronic funds transfer.

Question No: 34 (Marks: 2)

Define these two terms plaintiff and defendant?

The person who files a lawsuit are called plaintiff. And the person against whom it is filed is called defendant.

Question No: 35 (Marks: 3)

How lack of trust barrier can be overcome or minimized? Discuss it briefly

Online companies must establish a trust relationship with its costumers, because as we know that there is a gap that we feel that web based companies are not present in physical. There for web businesses the trust must be present between costumer and sellers.

Question No: 36 (Marks: 3)

What do we mean by internet-based EDI? Briefly explain how could it be used as substitute of VAN? (1 + 2)

Internet can support EDI in a variety of ways. Internet e-mail can be used as EDI message transport mechanism in place of having a VAN. An extranet can be created with the trading partner allowing a partner to enter information in the fields of web forms which correspond to the fields of EDI message. Also, web-based EDI hosting service can be utilized through web-based EDI software.

Question No: 37 (Marks: 3)

Briefly explain how does the bank check validity of e-coins when merchant sends them for deposit?

Coins used in the payment are encrypted with bank's public key, preventing the merchant to view them. Payment information is forwarded to the bank with encrypted coins during merchant's deposit. Only hash of the order description is included in payment information preventing the bank from knowing the order details.

Question No: 38 (Marks: 5)

Describe the advantages and disadvantages of Virtual PIN.(2.5+2.5)

Advantages and disadvantages of Virtual PIN:

Simplicity and no encryption is the biggest advantage of this payment system, which means that no special software is needed at the frond end. This payment system is good for low-cost information items. Therefore, it is suitable for buying online articles, journals, music. Where the cost of the items is not much. In that eventuality, only sales are lost rather than actual financial loss to the merchant if there is a fraud. In other words, only some extra copies of the information items are made in case of a fraud. On the other hand merchant is exposed too much greater financial loss if the purchase relates to the actual physical goods. One of the disadvantages of this payment model is that pre-registration of the buyer and the merchant with FV is mandatory in this set up. Moreover, maintaining a bank account (in case of merchant) and having a credit card (in case of a buyer) is also essential part of this system. One can say that the merchant side is less secured in the transaction because the goods are delivered by the merchant before the payment is actually received. The popularity of this payment system declined after 1998 mainly because of the introduction and development of encryption based payment mechanisms.

Question No: 39 (Marks: 5)

Differentiate between **Cyber squatting and concurrent use** with example.

Cyber squatting:

The act of intentionally registering domain names containing trademarks/trade names of prominent companies to later blackmail or demand ransom from those companies is called cyber squatting. It is regarded as an offence in most countries. Assume there is a firm 'Glory Enterprise' and it wants to have its web site. It also wants to have the word 'glory' as a part of its domain name because for years it has been recognized in the physical world through this word. However, at the time of registration of its domain name it finds that a person Mr. 'A' who has nothing to do with the business of the firm or the word 'glory' has already registered a domain name containing this word as a part of it. Since there cannot be two similar domain names, the firm is forced to request Mr. 'A' to transfer that domain name to it. In response, if Mr. 'A' blackmails or claims ransom from the said firm, he would be said to have committed cyber squatting.

Concurrent use:

This problem arises when two organizations have apparently legitimate claim to use the same domain name but cannot do so due to the uniqueness of domain names. Suppose, there is a company manufacturing electronic goods and another company selling French fries. Under the traditional trade mark law both these companies can have the same trade mark/trade name such as 'fry's'. The problem arises when both apply for the registration of a domain name containing the word 'fry's'. Here, both are legitimate claimants of this domain name but due to the element of uniqueness of domain names only one of them can be assigned the desired domain name.

Question No: 31 (Marks: 1)

Does Virtual PIN system involve the use of encryption?

Question No: 32 (Marks: 1)

What was the reason of decline in popularity of Virtual PIN Payment system?

Question No: 33 (Marks: 2)

What is the purpose of SETCo?

Question No: 34 (Marks: 2)

What does mean by Integrity?

Question No: 35 (Marks: 3)

What will be the role of e-commerce in Competitive strategy, in term of Customization?
Give precise answer.

Question No: 36 (Marks: 3)

What do you know about interactive advertisement? Briefly explain.
Interactive advertising uses online or offline interactive media to communicate with consumers and to promote products, brands, services, and public service announcements, corporate or political groups. Interactive Advertising as the "paid and unpaid presentation and promotion of products, services and ideas by an identified sponsor through mediated means involving mutual action between consumers and producers." This is most commonly performed through the Internet as a medium.

Question No: 37 (Marks: 3)

What is e-business storefront model?

Question No: 38 (Marks: 5)

Under Section 25, each certification service provider shall prepare a Certification Practice Statement (CPS).

What you understand by CPS?

Question No: 39 (Marks: 5)

What do we mean by e-coin? Explain its elements on which it consists. 2+3

2008

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Paper #1:

Question No: 31 (Marks: 1)

What is FVIPSS?

First Virtual. Internet Payment System Server (FVIPSS) FVIPSS or simply FV server sends email to the buyer if the goods were satisfactory

(page#111)

Question No: 32 (Marks: 1)

Identify behavioral modes of the customers on the web?

Three identified behavioral modes of the customers on the web are:

Browsers – customers who just browse through the site with no intention of buying

Buyers – customers who are ready to buy right away

Shoppers – customers who are motivated to buy but want more information

(page#132)

Question No: 33 (Marks: 2)

Briefly describe analytical attack on public key algorithms.

Analytical Attacks

Such attacks use some fundamental flaw in the mathematical problem on which the encryption system itself is based so as to break the encryption. (page#109)

Question No: 34 (Marks: 2)

What is the Section 4 of the ETO ?

Section 4 of the ETO provides:

“The requirement under any law for any document, record, information, communication or transaction to be in written form shall be deemed satisfied where the document, record, information, communication or transaction is in electronic form, if the same is accessible so as to be usable for subsequent reference”. (page#164)

Question No: 35 (Marks: 3)

Write precisely about the 4th stage of planning cycle?

Strategy assessment

Results of implementation plan are monitored and assessed so that any corrective measures or expansion plan can take place. Basically, you want to assess whether your strategy has delivered what it was supposed to deliver; whether your strategy is still viable/workable in the ever changing environment. In strategy assessment phase, you can learn from your mistakes and do your future planning. In case your EC project has been a failure, you can identify the problems and try to remove them. Some of the corrective measures can be to properly train your web team, establish or review your security or privacy policy, review or reassess your web design content, reconsider your marketing plan etc. For the strategy assessment, you can conduct surveys, collect information and receive feedback from different groups of people so that you have solid input from people coming from a variety of background. Sometimes, you have to entirely give up a particular strategy you followed and formulate a new strategy or set of strategies in light of the company's main objective or its mission. (page#160)

Question No: 36 (Marks: 3)

What is business promotion? Briefly explain any two methods of business promotion.
1+2

Promotions

E-business promotions can attract visitors to your site and induce them to purchase. Promotional messages can be sent both online and offline. Some popular promotional methods are as under:

Frequent-flyer miles

The online business has a contract with an airline such that the customer of the business earns specific miles from the airline free of charge if he purchases from the online business items up to a certain value.

Point-based rewards

On the performance of a pre-specified action, customers can be entitled to point-based rewards – t-shirts, mugs etc. with the company's logo etc. (Page#133)

Question No: 37 (Marks: 3)

How does the client purchase from merchant using E-Cash Payment system? Show the payment request format.

Making the Payment

Coins used in the payment are encrypted with bank's public key, preventing the merchant to view them. Payment information is forwarded to the bank with encrypted coins during merchant's deposit. Only hash of the order description is included in payment information preventing the bank from knowing the order details. (page#118)

Question No: 38 (Marks: 5)

Differentiate Electronic signature vs paper based signature

“**Electronic Signature**’ means any letters, numbers, symbols, images, characters or any combination thereof in electronic form, applied to, incorporated in or associated with an electronic document, with the intention of authenticating or approving the same, in order to establish authenticity or integrity, or both”. (page#163)

Note that a digital or electronic signature is believed to be more reliable as compared to paper signatures because it is not ordinarily possible to copy or forge an electronic/digital signature. But, that is very much possible in case of paper signatures (page#106)

Question No: 39 (Marks: 5)

Which stage of planning cycle Identify steps needed to put the strategy into action? Explain this stage briefly with the help of example

Implementation

In the implementation stage, you build a plan to identify steps needed to put the strategy into action and practically take those steps. For example, where your strategy is to pursue differentiation in terms of quality of service by using/arranging a web-based call centre through which the customers can immediately register their complaints; then you will have to select appropriate individuals who are suitable for the job in the implementation stage (page#160)

Question No: 40 (Marks: 10)

How can you define E-business Public Relation? Elaborate different modes to disseminate information for E-business public relations.

E-business Public Relations

Public Relations (PR) keeps the customers and employees of a business current or updated as regards information about products, services and internal and external issues such as any promotional activities, new products, customer reactions etc. Following different modes can be used to disseminate information:

Press releases

Speeches

Special events – seminars, video conferencing etc

E-mails

Chat sessions

Bulletin board – people can post comments Presentations/exhibitions (page#135)

Question No: 41 (Marks: 10)

Explain briefly the following two types of Data Mining, with examples: (5+5)

a. *Characterization (4+1 example)*

Characterization

It is discovering interesting concepts in concise and succinct terms at generalized levels for examining the general behavior of the data. For example, in a database of graduate students of a university the students of different nationalities can be enrolled in different departments such as music history, physics etc. We can apply characterization technique to find a generalized concept/answer in response to the question that how many students of a particular country are studying science or arts (page#144)

b. *Clustering (4+1 example)*

Clustering

A cluster is a group of data objects that are similar to another within the same cluster and are dissimilar to the objects in other clusters. For example, clusters of distinct group of customers, categories of emails in a mailing list database, different categories of web usage from log files etc. It serves as a preprocessing step for other algorithms such as classification and characterization. K-means algorithm is normally used in clustering (page#145)

paper#2

Question No: 31 (Marks: 1)

What is Quantum computing?

Quantum computing is the branch of computer science that deals with the development of cryptographic algorithms. It can also be used to find flaws in the cryptographic system/algorithms and to launch attacks. (page#109)

Question No: 32 (Marks: 1)

what are the three attacks on symmetric key algorithms?

Attacks on Symmetric Key Algorithms

Following attacks have been reported on symmetric key algorithms:

Key Search Attacks
Cryptanalysis

System-based Attacks (page#108)

Question No: 33 (Marks: 2)

What do we mean by the anonymity in E-Cash Payment system?

Anonymity of the buyer is the key feature of this system. There are three participants in it, namely, buyer, merchant and bank. Both, symmetric and asymmetric type of cryptography is used in this system. (page#116)

Question No: 34 (Marks: 2)

Define these two terms plaintiff and defendant?

Note that the person who files a lawsuit is called plaintiff and the person against whom it is filed is called defendant (page#177)

Question No: 35 (Marks: 3)

What is E-business? Differentiate it with E-Commerce with the help of real life examples.

An e-business is defined as a company/entity that has an online presence. E-businesses that have the ability to sell, trade, barter or transact over the web can be considered as e-commerce businesses. An e-business model is defined by a company's policy, operations, technology and ideology. (page#125)

E-commerce is a combination of three different areas of study, namely, technology, business and law/policy. We have studied the technology and business side of e-commerce to a reasonably good extent. (page#161)

Question No: 36 (Marks: 3)

Identify the upstream activities in supply chain of a milk processing?

Upstream activities relate to materials/services or the input from suppliers Fig. 1 below shows a simple example of supply chain of a milk processing unit. Note that milkmen supply milk to the processing facility. The processing business has ordered a corrugate paper company to supply boxes/paperboard for packaging. The paper company receives its raw material from a lumber company for manufacturing boxes. The lumber company also supplies paper to label printing business for making/printing paper labels. These are upstream activities. The boxes and labels should be available to the processing business at the packaging stage. The milk processing unit processes the milk, packages it in boxes and attaches labels to them. These are internal activities. The packaged milk is sent to distributors who distribute the same at different stores from where customers purchase. These are downstream activities. (page#155)

Question No: 37 (Marks: 3)

Briefly elaborate the concept of Perceived Value as an element of branding?

Perceived value

A product/service may be different and relevant (customers can see them using it), still they would not buy unless they find some perceived value in it. For example, a restaurant may be selling a unique dish that relates/associates itself to the taste of majority of people; still they may not be inclined to buy it because of certain negative associations, such as its high fat content. (page#139)

Question No: 38 (Marks: 5)

What is branding? What elements should be considered to create and maintain a successful brand?

Branding

A brand refers to an emotional shortcut between a company and its customers. You can say that it is the trade name/symbol that reminds customers about the reputation of a company regarding its products or services.

Elements of Branding

Researchers have identified three elements of branding, that is, Differentiation Relevance Perceived Value (page#138)

Question No: 39 (Marks: 5)

How industry value chain proceeds on? Explain with the help any real life example.

Industry value chains

It is useful to examine where a strategic business unit fits within its industry. Porter uses the term value system to describe larger stream of activities into which a business unit's value chain is embedded. Different strategic business units are associated, each having its value chain, to form industry value chain. By understanding how other business units in industry value chain conduct their activities, managers can identify new opportunities for cost reduction and product improvement. (page#153)

paper#3

Question No: 31 (Marks: 1)

What stands for CRM?

Customer Relationship Management (CRM) (page#92)

Question No: 32 (Marks: 1)

Identify customers is one of the areas in a strategic business unit **according to Michael Porter**. List what kind of activities is performed in this area?

A strategic business unit is a combination of a particular product, distribution channel and customer type. In 1985 Michael Porter gave the idea of value chains in his famous book "Competitive advantage". A value chain is a way of organizing activities that each

strategic business unit undertakes to design, produce, promote, market, deliver and support the products or services it sells.

Primary and Support activities

Porter identified that there are some primary activities as well as certain supporting activities in a strategic business unit. Following is the example of value chain for a strategic business unit (page#152)

Question No: 33 (Marks: 2)

What are data warehousing main tasks?

A data warehouse is a repository for long-term storage of data from multiple sources, organized so as to facilitate the management for decision making. (page#140)

Question No: 34 (Marks: 2)

What do you know about promotion by "Coupons"?

Coupons

Online coupons are placed on certain popular sites to attract customers for online shopping. They can use these coupons for shopping through specific web sites. (page#133)

Question No: 35 (Marks: 3)

What do you know about interactive advertisement? Briefly explain.

Interactive Advertising

It uses a combination of rich media (such as audio, video, animations) and traditional forms (such as print, TV or radio ads) in order to involve customers in advertising process to increase brand recognition (page#135)

Question No: 36 (Marks: 3)

What is e-business storefront model?

Storefront Model

It represents basic form of e-commerce where buyers and sellers interact directly. Merchants need to organize online catalog of products, take orders through their websites, accept payments in a secure environment and send items to the customers. They can also store and manage customer data in databases. A storefront model uses the shopping cart technology which allows customers to accumulate items they want to buy during shopping. This is quite popular in B2C transactions. (page#128)

Question No: 37 (Marks: 3)

How lack of trust barrier can be overcome or minimized? Discuss it briefly

It is very important for online businesses to establish trusting relationships with their customers like in the physical world where companies ensure that customers know who they are. However, it is difficult to build trust because a kind of anonymity exists for companies trying to establish web presence. (page#161)

Question No: 38 (Marks: 5)

Describe the role of E-commerce in competitive strategies.

Competitive Strategy

Ability of an organization to prosper arises from its competitive advantage over other organizations operating within its market sector. The strategy of a business to achieve this goal of competitive advantage is known as competitive strategy. Three basic strategies for competitive advantage are as under:

Cost leadership
Differentiation
Focus (page#157)

Question No: 39 (Marks: 5)

What is the importance of hash function and how it is applied on Message digest?(3+2)

There are two terms that you should note here – hash function and message digest. Hash function is a oneway mathematical function applied to a message. Result of the hash function is unique to each message called Message Digest. A message digest is a single large number typically between 128 to 256 bits in length. Thus, we can have up to 2256 different messages each having a unique message digest associated with it. This gives rise to almost an incalculable figure. We can safely assume that each different message that can possibly be typed would have a unique message digest on applying a hash function. A hash function is said to be one way because we cannot go back to the original text on applying the hash function to a message digest. Basically, the concept of hash function and message digest is used to confirm the integrity of a message.
(page#103)

Paper#4

Question No: 31 (Marks: 1)

Name any 3 E-Business models?

Storefront Model

Auction Model

Online Banking

Question No: 32 (Marks: 1)

What is the condition of contract to be formed?

Question No: 33 (Marks: 2)

Briefly describe analytical attack on public key algorithms.

Analytical Attacks

Such attacks use some fundamental flaw in the mathematical problem on which the encryption system itself is based so as to break the encryption

Question No: 34 (Marks: 2)

Do you agree that Customization is one of the role of e-commerce in Competitive Strategy. Discuss briefly

Customization

With the help of EC, customer data can be gathered and analyzing it customers can be served in a better manner according to their needs. One can, thus, implement differentiation and focus strategy.(page#157)

Question No: 35 (Marks: 3)

How the coin is minted by E-Cash bank?

Minting of the coin

A long serial no. is randomly generated by the client's Cyber wallet in order to mint a coin. This serial no. is blinded, which means that it is multiplied with a blinding factor "r" and sent to the e-cash bank for signatures. Thus, the e-cash bank cannot see the serial no. it is signing. Key version (corresponding public key of the bank) is also part of the coin, and is sent usually at the time of account opening. An e-cash bank may have 1 dollar signature, 5 dollar signature or 10 dollar signature etc. If the client wants to mint a coin of 2 dollars then e-cash bank would use its private or secret key of 2 dollars to sign the serial no. (page#116)

Question No: 36 (Marks: 3)

What does it mean by Relevance element of branding?

Relevance means to what degree is the product/service useful for potential customers. For example, you may have designed very distinguished jewelry but very few people use or purchase the same. In fact, it may prove to be too costly for most people to buy. Note that your product/service should be capable of easily relating itself to the people. (page#139)

Question No: 37 (Marks: 3)

How lack of trust barrier can be overcome or minimized? Discuss it briefly

Lack of Trust

It is very important for online businesses to establish trusting relationships with their customers like in the physical world where companies ensure that customers know who they are. However, it is difficult to build trust because a kind of anonymity exists for companies trying to establish web presence. There was, once, a famous cartoon used to depict that on the internet nobody knows whether you are a dog. The issue of anonymity can be explained by the example that a visiting customer will not know in case of an online bank as to how large or well-established the bank is, simply by browsing through its web site. On the other hand, visitors would not become customers unless they trust the company behind the site. (page#161)

Question No: 38 (Marks: 5)

What is the importance of hash function and how it is applied on Message digest?(3+2)

There are two terms that you should note here – hash function and message digest. Hash function is a oneway mathematical function applied to a message. Result of the hash function is unique to each message called Message Digest. A message digest is a single large number typically between 128 to 256 bits in length. Thus, we can have up to 2^{256} different messages each having a unique message digest associated with it. This gives rise to almost an incalculable figure. (page#103)

Question No: 39 (Marks: 5)

Where the originator has not agreed with the addressee that the acknowledgment be given in a particular form or by a particular method, an acknowledgment may be given by?

Where the originator has not agreed with the addressee that the acknowledgment be given in a particular form or by a particular method, an acknowledgment may be given by:

any communication, automated or otherwise, by the addressee ; or any conduct of the addressee, sufficient to indicate to the originator that the electronic communication is received.” (page#167)

Question No: 40 (Marks: 10)

Differentiate between the online businesses (E-business) with offline businesses (Traditional business). Support your answer with solid examples.

E-Business

An e-business is defined as a company/entity that has an online presence. E-businesses that have the ability to sell, trade, barter or transact over the web can be considered as e-commerce businesses. An e-business model is defined by a company's policy, operations, technology and ideology. (page#125)

traditional businesses operating at one location are subject to only one set of tax laws, but due to the international scope of ecommerce, e-businesses might have to comply with multiple tax laws enforced in different countries (page#183)