

BCS-062

E-COMMERCE

June 2018

1.

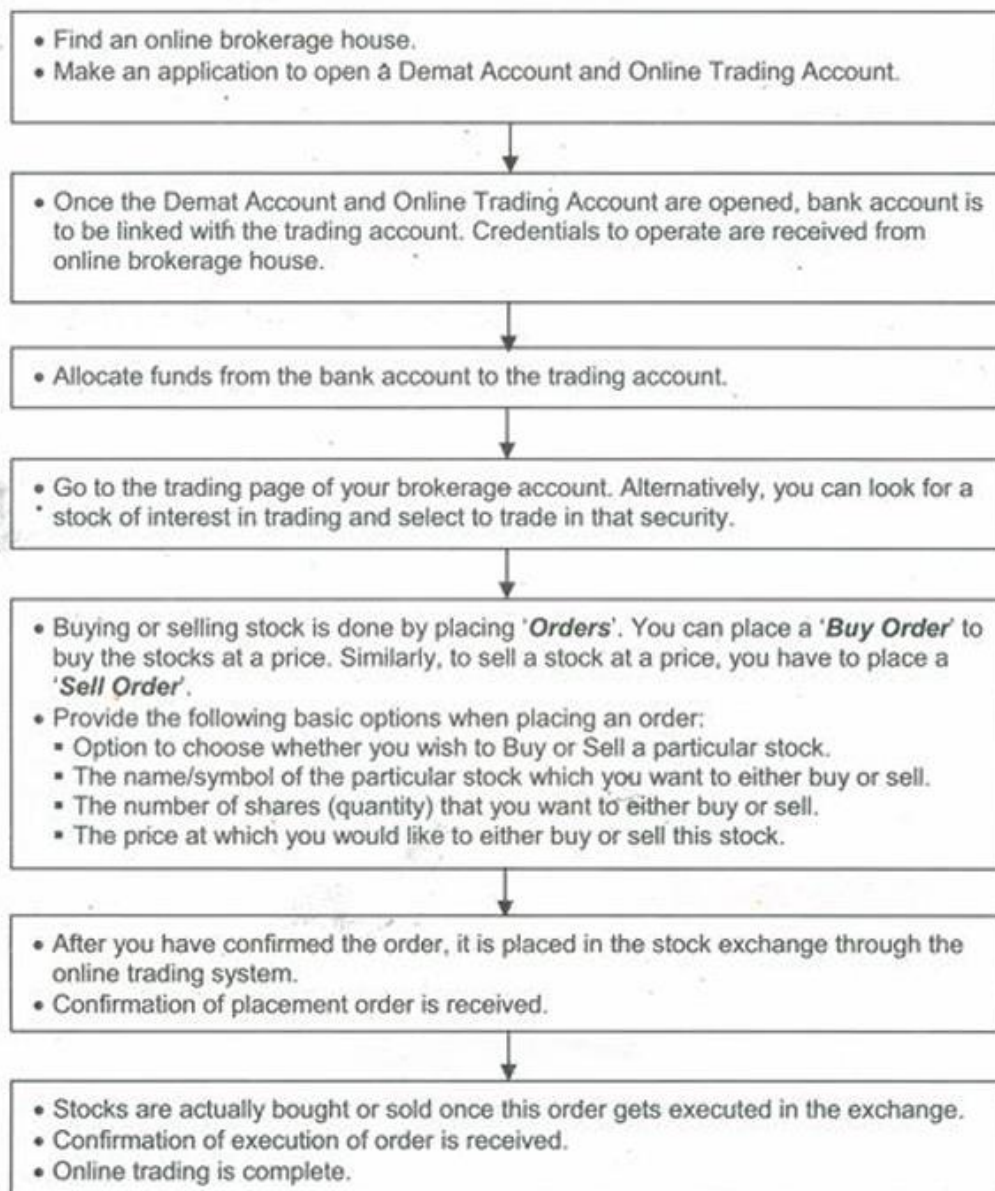
(b) What is meant by Online Trading ? How is it performed ? Explain various payment modes for online trading.

Ans: It is a platform that allows individuals and institutions to buy and sell financial securities, such as stocks, bonds, commodities and currencies, through the internet. The investor / trader gets updated information online. It leads to the decrease in the practice of an investor of looking at the share price in the morning newspaper. The transaction is dealt at a price at a moment checked in an online trading platform than issuing instructions for execution to brokers by phone or by person.

Advantages:

- It leads to paperless transactions. That is, shares are held in electronic form in the demat account.
- It helps in improving market transparency.
- Investors can trade from anywhere with an internet connection.
- Online trading system platforms are available 24/7, allowing traders to buy and sell securities at any time.
- Online trading system has lower commissions and fees compared to traditional brokerage services.
- It helps in smooth market operation while retaining the flexibility of conventional trading practices.
- Traders have access to real-time market data, enabling them to make quick decisions based on the latest information.
- There is free access to high quality research reports generated by financial players.
- All the records of transactions are available online.

Procedure of online trading system:



2.

(a) List any five cyber offences and related penalties under the IT Act, 2000. 5

Ans:

Cyber crime	Penalties
Sending offensive or false messages through communication service, etc. It is also known as cyber stalking.	Imprisonment up to three years and with fine.

Cyber terrorism: Whoever uses cyber space with intent to threaten the unity, integrity, security or sovereignty of India or to strike terror in the society or any section of the people.	Imprisonment which may extend to life imprisonment.
Violation of privacy: Intentionally or knowingly captures, publishes or transmits the image of any person without his or her consent, under circumstances of violating the privacy of that person.	Imprisonment up to three years or fine up to two lakh rupees or both.
Breach of confidentiality and privacy: Securing access to any Computer, system or network.	Imprisonment up to two years or fine up to one lakh rupees or both.
Identity theft: Fraudulently or dishonestly make use of the .electronic signature, password or any other unique identification feature of any other person.	Imprisonment up to three years or fine up to rupees one lakh.
Hacking the Computer system	Imprisonment up to three years or with fine which may extend up to 5 lakh rupees or both.
Publishing or transmitting obscene material in electronic form.	First conviction: Imprisonment up to three years and with fine up to five lakh rupees. Subsequent conviction: Imprisonment up to five years and with fine up to ten lakh rupees .

(b) What are the different components in the online delivery of goods and services ?  
Explain their role. 5

Ans: Different components in the delivery of goods and services online are:

\* E-shoppers: They are the end-users of the goods and services. E-shoppers buy products and delivery services from e-retailers. They examine internet marketplaces, choose items, and finish transactions. Provide valuable insights into products, services, and the overall shopping experience, influencing future decisions of both businesses and other customers. Their preferences and feedback drive market trends and influence businesses decision.

\* E-Retailers: They are the primary stakeholders responsible for creating and offering goods and services. They buy delivery services from delivery operators and logistics intermediaries. They must ensure product availability, manage inventories, set prices and deliver quality customer service. They also coordinate with shipping providers for delivery

of goods to customers. Handle inquiries, manage returns and exchanges, and provide support throughout the purchase journey. Use internet marketing, sales, and tailored suggestions to draw in and keep consumers. Make sure that products are sourced on time, keep up with suppliers, and streamline logistics for effective delivery.

\* Delivery operators: Delivery services are crucial for transporting goods from e-retailers to e-consumers. They need to ensure that packages are delivered in timely and safe manner to customers' doorsteps in an efficient manner. Give companies and consumers access to real-time tracking data to promote openness and confidence.

3.

(a) Explain any two EDI standards. 5

Ans: There are multiple EDI standards such as ANSI X12, EDIFACT, TRADACOMS (Trading Data Communications), ODE1TE (Organization for Data Exchange by Tele Transmission in Europe), VDA (Verband Der Automobilindustrie), SWIFT (Society for Worldwide Interbank Financial Telecommunication).

ANSI X12: ANSI X12 is most popular in North American region. It defines standards for various business transactions such as order processing, material handling, warehousing services, manufacturing services, etc. X12 standard uses transaction set to identify each business transaction and each transaction set is denoted by a numeric code.

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ISA*00* 00* 02*1234750000*04*1234567890*020627*1304*U*00401*000001403*0*P*>
GS*PO*1239721193*1234567890*12330627*1204*1403*X*123010~
ST*850*12303001~
BEG*00*SA*123177**20030627~
REF*AN*123494~
PER*BD*SAMPLE NAME*TE*123225555~
FOB*PB~
DTM*123*12330705~
DTM*123*12330704~
PKG*****01~
TDS***H*OUR CR/T~
N9*AH*123177~
MSG*THIS PURCHASE ORDER IS SUBJECT TO THE SAME TERMS AND~
MSG*CONDITIONS AS PURCHASE ORDER FORM 1030~
MSG*PICKUP NO. E123362~
N1*ST*ABC INC*9*1231372092527~
N2*Tracy Produce~
N3*12300 NW Road~
N4*SAMPLE*AB*12376~
N1*BT*SAPLE INC*9*1231372091700~
N2*NATIONAL SERVICES CENTER~
N3*P.O. BOX 12393~
N4*SAMPLE*AZ*12338~
N1*VN*SAMPLE*9*1234567890000~
N3*P.O. BOX 11111~
N4*SAMPLE*CA*90001~
PO1**10*CA*12.5**UA*123040304101*IN*12303041*VN*22222~
CTP*R5*FCP*12.5~
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## EDIFACT:

EDIFACT is an EDI standard format developed under UN (United Nations), Hence, EDIFACT is also denoted as UNIEDIFACT. This is the international standard which consists of the following four key elements:

- Syntax which defines the message structure
- Data elements within the document
- Segments which groups the data elements

- Messages which are an ordered group of segments and symbolize a business transaction.

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UNB+UNOA:1+123435656:1+123415160:1+123515:1234+00000000000778'
UNH+12300000000117+INVOIC:D:978:UN'
BGM+123+342459+9'
DTM+3:12360515:102'
RFF+ON:123052'
NAD+BY+123820524::16++SAMPLE MID-RANGE ENGINE PLANT'
NAD+SE+123435656::16++GENERAL WIDGET COMPANY'
CUX+1:USD'
LIN+1++123870:IN'
IMD+F++::WIDGET'
QTY+47:1230:EA'
ALI+US'
MOA+123:1232.58'
PRI+INV:1.179'
LIN+2++123871:IN'
IMD+F++::DIFFERENT WIDGET'
QTY+47:20:EA'
ALI+JP'
MOA+123:410'
PRI+INV:20.5'
UNS+S'
MOA+39:1237.58'
ALC+C+ABG'
MOA+8:525'
UNT+23+00000000000117'
UNZ+1+00000000000778'

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(b) Explain any five strategies to increase visibility to your e-commerce website. 5

Ans: The following are some of the strategies to increase e-visibility of your e-commerce website:

Easy URL: The website URL must be simple and catchy so that can be easily remembered. At the same time, name should be sensible that it can be guessed and easily remembered by users.

**Advertising:** Even while word-of-mouth marketing is more effective than ever, traditional forms of promotion through media like TV, newspapers, etc. They contribute significantly to greater visibility.

**Search engine optimization :** To boost the visibility of an e-commerce business, focus on optimizing search engine visibility. It is a method of forcing a website to appear in the search engine results. The likelihood that more customers will visit your website increases with its search engine ranking.

**Social Media Marketing:** Using social media platforms can significantly boost your visibility. It helps user/followers and other potential customers to know about your site and business.

**Increasing traffic:** It is essential for your site to regularly post on social. networking sites. It is paramount to create and maintain your brand positioning to survive. It is essential to remember that anything out of sight of customer will be out of his/her mind. This can be improved by taking the following measures:

- (i) Uploading contents like special offers, news, pictures, phrases, any eye catering information for the regular followers.
- (ii) Knowledge about competitions, doing research and checking what the competitors are uploading, their offers and number of posts are they doing.

4.

(a) Explain transplanted real world business models and native Internet business models.

5

**Ans: Transplanted Real-World Business Models :** Business activities which occur naturally in real-world and have been transplanted onto the Internet.

The following are some of the business models that fall into the above mentioned category:

- **Mail-Order Model:** A web site shop front is employed to sell physical goods which are then posted or delivered (Amazon.com).
- **Advertising Based Model:** Where advertising revenues support the operation of a free service (Yahoo.com)
- **Subscription Model:** Users subscribe for access to a database of digital products; well suited for combination with digital delivery (informationweek.com)
- **Free Trial Model:** Software is available for free download or distributed on CD-ROM but will only work for a limited period or will not be fully, functional until a fee is paid.

- Direct Marketing Model: The use of e-mail based direct marketing (often ends up as spam).
- Real Estate Model: Sell web space, domain names and e-mail addresses.
- B2B: Businesses transact between corporate entities via the Internet, including financial, research, legal and employment services.
- Incentive Scheme Models: Opportunities to win prizes or to secure "free" or inexpensive goods or services are used to entice people to accept advertising or to provide personal information.

Native Internet Business Models: Business activities that have evolved in the Internet environment and are native to it.

The following are some of the business models that fall into above mentioned category:

- Library Model: The web site that offers free information.
- Freeware Model: It provides free software (basic versions may be free) or open source software.
- Information Barter Model: Some sort of exchange of information over the Internet between individuals and organizations.
- Website Hosting and Other Internet Services: Hosting web servers, e-mail as well as URL and e-mail re-direction services.
- Digital Delivery Model: Takes place when digital products are purchased.
- Digital Products Model: Images, movies, animation, audio, text, certificates and software will be available as products.
- Access Provision Model: Provides access to Internet from enterprises called Internet Service Providers (ISPs).

(b) Explain the two categories into which search engines are classified.

Ans: Search engines are classified into two categories.

- Crawler based search engine: these are the most common type of crawler based search engine. These search engines called robot or bot, generally index sites based on the content and links to your website. Google and Alta vista are examples. The exact method of ranking the website by crawler based search engine is kept confidential as rules keep on changing with time .



- Human powered directories: These are compiled by human reviewers who examine and evaluate description of website and then they rate the contents using their own criteria. Normally, this type of combination is done for listing by paid search engines. Offer more curated and relevant results, but have a smaller scope compared to crawler-based engines.

5.

(a) What is SSL ? Explain its working with the help of a figure. 5

Ans: It is a web security protocol that is used to establish an encrypted link between a web server and a web browser. It was developed by Netscape. It operates between the application and transport layers. It is commonly used to manage the security of message transmission on the Internet. It secures the data during online transactions or when transmitting confidential information. It is a solution to authentication, privacy and integrity problems and avoids attacks. SSL authenticates servers and users. It establishes encrypted link to hide the data transmitted thus leading to data integrity.

Characteristics of SSL:

- It operates at TCP/IP transport layer,
- It uses a dedicated TCPIIP socket,
- It encrypts the communications between the server and client when connection is established, and
- It requires a server certificate.

Working of SSL:

The following are various steps of SSL handshake:

1. Establishing a connection:

Client hello: SSL client attempts to connect to a SSL server (website secured with SSL) by sending a client hello message.

Server hello: Web server responds with a server hello.

2. Client requests web server to prove its identity.

3. The server sends its SSL certificate to the client. The certificate contains the server's public key and is signed by a trusted Certificate Authority (CA).

4. The client verifies the server's certificate against its list of trusted CAs. Accordingly, it sends a message to the server. If the certificate is valid, the client trusts that it is communicating with the right server.

5. If the server requires client authentication, it asks for "client certificate request".

6. Then the client sends its certificate.

7. SSL server verifies the signature on the client certificate.

8. Client sends a digitally signed acknowledgement to start sharing.

9. Server sends a digitally signed acknowledgement to start sharing.

10. The data in encrypted form is shared between the server and browser and a secured session starts that protects message privacy, integrity and security. A secure session starts between server and client enabling data to be transmitted in encrypted form, thus ensuring privacy, integrity and security.

11. When the session ends, both parties can send a message to close the connection securely.

(b) List and explain any five emerging trends in m-commerce. 5

Ans: The following are some of the emerging trends in the space of m-commerce:

**M-wallet:** Using mobile devices for various ranges of financial transactions. M-wallets like Apple Pay, Google Pay are becoming more popular. It allows users to make quick and secure payments using their smartphones.

**Near Field Communications (NFC)** enable radio communication between smart phones and other similar devices which are in proximity (normally not more than a few inches) or when they touch each other.

Mobile coupons are expected to become popular at retail stores.

Social commerce enablement through mobile devices. Social media platforms are increasingly integrating shopping features.

**Taking off of Mobile first strategy** wherein the enterprises design their online strategy predominantly around mobile devices first making the user experience on mobile devices more friendlier.

**In-store personalization** based on mobile app which indicates the available sales and acts as a smart store guide.

Mobile shopping is going to play a major role in the shopping space.

In-store personalization based on mobile app which indicates the available sales and acts as a smart store guide.

Majority of purchase decisions may be done via mobile phones during shopping. It includes product research, product comparison etc.