Chapter - 1
CONCEPT AND SCOPE OF INFORMATION TECHNOLOGY

One marks question:

Q.1. Define IT

Ans. Information technology (IT) is the use of computers and software to manage and process information. It encompasses a wide range of technologies and tools, including hardware, software, and networks, that are used to collect, store, process, and analyze data.

Q.2. Write an advantage of IT.

Ans. IT improves efficiency by automating repetitive tasks and allowing for faster communication and data storage.

Q.3. How IT is used in the field of recreation?

IT is used in the field of recreation for online gaming, virtual reality experiences, and streaming of movies and shows.

Q.4. How IT assist in the field of health?

IT assists in the field of health through electronic health records, telemedicine, and medical imaging technology.

Q.5. List 3-4 areas where IT is extensively used?

Ans.1. Business and finance   2. Healthcare   3. Education   4. Entertainment and media.

Fill in the blanks:

1. …………… includes words, numbers, pictures, symbols or codes etc. (Information / Education)
2. Government uses ………… control systems to manage traffic. (Computerised / Media)
3. Internet has opened up ………… direct communication in different parts of world. (Face to Face / Mouth)
4. Using …………… one can e-mail, chat or video calling to anyone anywhere. (Finance / Internet)
5. Payment of purchased products can also be made ……………. (Off-line / On-line,)

Ans. 1. Information,   2. Computerised,   3. Face to Face, 4. Internet,   5. On-line,

MCQ

1. Information Technology refers to
(a) Processing information (b) Transferring information   (c) Storing information (d) All of the above.
2. Information Technology has helped in increasing ......
(a) Privacy   (b) Unemployment   (c) Globalization (d) Lack of job security
3. People use PC's for ....
(a) Entertainment   (b) Internet   (c) E-mail   (d) All of the above.
4. Computers are helpful in
(a) teaching   (b) learning   (c) business   (d) all of the above.
5. Full form of CAM
(a) Computer Aided Manufacturing   (b) Computer Animation Manufacturing
(c) Computer Aided Maintenance   (d) None of the above.

Ans. 1. (d)   2. (c)   3. (d)   4. (d)   5. (a)

Two Marks Questions:

Q.1. Describe any two advantages of IT?

Ans. 1. **Improved Efficiency:** The use of IT tools and systems, such as automation and software, can significantly improve the efficiency of various tasks and processes within an organization or individual.

2. **Increased Access to Information:** With the widespread use of the internet and digital technologies, it is now easier than ever to access and share information. This can be beneficial in many areas, such as education, research, and business, as it allows for more informed decision-making and improved communication.

Q.2. What is the importance of computers in banking industry?

Ans. Computers play a vital role in the banking industry as they automate and streamline many of the processes involved in banking operations. This includes tasks such as maintaining customer records, processing transactions, and analyzing financial data.

Q.3.What is the importance of computers for students?

Ans.Computers play an important role in the education of students by providing access to a vast array of information and resources, allowing for interactive learning and collaboration with classmates, and facilitating the use of educational software and programs.

Q.4. Write the role of IT in the filed of education.

Ans. The role of IT in the field of education is to enhance the teaching and learning process by providing access to vast amounts of information and resources, enabling remote learning, facilitating communication and collaboration among students and teachers, and improving overall educational outcomes.

    1. Explain any four advantages of I.T?

Ans. Information technology (IT) refers to the use of computers and software to manage, process, store, and transmit information. IT has become an integral part of modern society and has drastically changed the way we live and work.

Improved Efficiency: IT has greatly increased the efficiency of various tasks and processes by automating repetitive and time-consuming tasks. This has led to faster completion of work, improved accuracy, and reduced costs for organizations.

Increased Connectivity: IT has made it easier for people to connect and communicate with each other, regardless of their location. This has led to greater collaboration, improved productivity and better access to information.

Improved Quality: IT has enabled the use of advanced techniques and tools for data analysis and decision-making, which has led to improved quality and effectiveness of products and services. This also helps in better customer service and also in providing more accurate and timely information.

In terms of the scope of IT, it is used in a wide range of industries and sectors, including:

Education: IT is used in the field of education for online learning, virtual classrooms, and educational software.

Overall, IT has brought about many advancements and improvements in different areas of our lives, making it an important and essential aspect of modern society.

    2. What are the four limitations of information Technology?

Ans. Information technology has several limitations, including:

Cost: The cost of acquiring and maintaining IT equipment and infrastructure can be high, particularly for small and medium-sized businesses.

Cybersecurity: The increased use of technology has led to a rise in cybersecurity threats, such as hacking, malware, and phishing attacks.

Lack of Privacy: The use of technology can lead to a loss of privacy, as personal information is often stored and processed by third-party companies.

Digital Divide: Not everyone has equal access to technology, which can create a digital divide between those who have access to technology and those who do not.

Chapter - 2
ELEMENTS OF A COMPUTER SYSTEM

Q. 1. Define a computer.

Ans. We can define a computer as : An electronic device which takes input from the user, stores the data, processes data and generates the output according to the instructions.

Q. 2. What is meant by Hardware ?

Ans. Hardware means all interconnected electronic devices that you can use to control the computer's operation, input and output.

Q. 3. Define Software.

Ans. Software is a set of instructions that makes the computer perform tasks.

Q. 4. What is the working principle of digital computer ?

Ans. Digital Computers work on the working principle of counting. They operate on discrete data and mainly use binary numbers.

Q. 5. What are output devices ?

Ans. Output devices are those which present the processed data to the user. The most common output devices are the monitor and the printer.

Fill in the blanks

1. A computer can ……….huge amount of data.
2. The speed of the computer is basically measured in ………. and ………..seconds.
3. …………. computer permits several individuals to use the same computer at the same time.
4. Computer ……….. learn by experience.
5. In second generation ……………. were used.

Ans. 1. store,   2. nano & pico,   3. Multi User,   4. do not,   5. transistors,

MCQ

1. Pocket size computers are also known as
(a) Workstations (b) Main Frame Computers   (c) Hand held Computers (d) none of the above.
2. Scanner is a type of
(a) Input device   (b) Output device   (c) Both a & b   (d) None of the above
3. Full form of CPU is
(a) Control Processing Unit   (b) Central Processing Unit
(c) Controlling Processed Unit   (d) None of the above
4. Computers may be used in
(a) Homes   (b) Offices   (c) Moving Car   (d) Everywhere
5. Transistors are used in
(a) First Generation Computers   (b) Second Generation Computers

(c) Third Generation Computers   (d) Fourth Generation Computers

Ans. 1. (c)   2. (a)   3. (b)   4. (d)   5. (b)

Q.1. What do you mean by output devices?

Ans. Output devices are components of a computer system that display or play the results of the computer's processing, such as a monitor, speakers, or printer.

Q.2. What are the important characteristics of computer?

Ans. The important characteristics of a computer include speed, accuracy, storage capacity, versatility, and automation. Other important characteristics include reliability, ease of use, and connectivity. Additionally, computers are able to process and manipulate large amounts of data quickly and accurately, making them essential tools for a wide range of tasks and industries.

Q.3. Explain mainframe computers?

Ans . Mainframe computers are large, powerful and expensive computers that are typically used by large organizations such as governments, banks, and major corporations. They are designed to handle the processing of large amounts of data and are capable of supporting hundreds or thousands of users simultaneously. They are typically used for tasks such as data processing, database management, and large-scale scientific and engineering calculations.

Q.4. What do you mean by input?

Ans Input refers to the process of entering data or information into a computer system. It can be done through various devices such as a keyboard, mouse, scanner, microphone, etc. The input is then processed by the computer's central processing unit (CPU) and stored in the memory for further use or used to produce output.

Four Marks Question:

Q.1. What are the important characteristics of computers?

Ans **Speed:** Computers can process large amounts of data quickly and efficiently.

Accuracy: Computers are able to perform calculations and process data with a high degree of accuracy.

Diligence: Computers can perform repetitive tasks without getting tired or making errors.

Automation: Computers can automate repetitive tasks, reducing the need for human intervention.

Q.2. What are the various types of computer?

Ans. There are several types of computers, including:

Personal computers (PCs) - These are designed for individual use and include desktop computers, laptops, and tablets.

Workstations - These are powerful computers designed for technical or scientific applications and are commonly used by engineers, architects, and animators.

Servers - These are specialized computers that store, manage, and distribute data and resources over a network.

Mainframe computers - These are large, powerful computers that can process massive amounts of data and are typically used by large organizations and government agencies.

Supercomputers - These are the most powerful computers in the world and are used for complex scientific, engineering, and research tasks.

Analog computers - These computers use continuous physical phenomena such as mechanical, hydraulic or electrical to model the problem being solved.

Hybrid computers - These are a combination of analog and digital computers.

Chapter - 3
HARDWARE CONCEPTS

One marks question:

Q. 1. What is meant by memory ?

Ans. Memory is the storage area where all inputs are stored and all outputs are stored.

Q. 2. What is Primary Memory ?

Ans. Primary memory is that memory which holds the data and instructions while these are
being used by the computer system. It is a direct access storage.

Q. 3. What do you mean by Secondary Memory ?

Ans. Secondary memory is supplement to primary memory, it holds data and instructions on
permanent basis.

Q. 4. Which memory is volatile in nature ?

Ans. RAM is volatile in nature.

Q. 5. Which port is used for attaching a pen drive to your computer ?

Ans. USB port is used for attaching a pen drive.

Fill in the blanks

1. CD can generally store **……….** MB of data.

2. **…………** memory can be erased and re-written a limited number of times.

3 **………..** devices enable user to enter information into computer.

4 **…………** input device is used in playing games.

5. **…………** is an output device that produce soft-copy output.

Ans. 1. 700,   2. Flash,   3. Input devices, 4. Joystick,   5. Monitor,

1. Physical components of the Computer system are known as
(a) Hardware   (b) Software   (c) Firmware   (d) None of these.
2. Which storage device can be easily carried out
(a) Main memory   (b) Floppy Diskette   (c) System Cabinet   (d) Hard disk.
3. IC stands for
(a) Integration Chip   (b) Integrated Chip   (c) Inter chip   (d) None of these.
4. Full Form of RAM is
(a) Random Access Memory   (b) Read Always Memory
(c) Ready to access memory   (d) Readily available memory.
5. Which device is commonly used portable storage device ?
(a) Pen drive   (b) Hard disk   (c) RAM   (d) None of these.

Ans. 1. (a)   2. (b)   3. (b)   4. (a)   5. (a)

Two Marks Questions:

Q.1. What do you mean by hardware?
Ans Hardware refers to the physical components of a computer system, such as the processor, memory, storage, and input/output devices. It is the tangible and visible parts of a computer system that can be touched and seen.

Q.2. What is the function of input unit in the computer?
Ans. The input unit, also known as input devices, are used to input data and instructions into a computer. Examples of input devices include keyboard, mouse, scanner, microphone, and digital camera. The input data is then processed by the computer's central processing unit (CPU) and the results are output through output devices, such as a monitor or printer.

Q.3. What are the functions of output devices?
Ans. Output devices are used to display, print, or otherwise present the results of data processing. They can include monitors, printers, speakers, and projectors, among others. The main function of output devices is to convert the electronic signals from the computer into a format that is easily understandable by the user, such as text, images, or sound. They also allow the user to interact with the computer and provide feedback to the user. Additionally, output devices also help to store the processed data for future reference.

Q.4. Write the names of any six output devices?
Ans.1. Monitor 2. Printer 3. Speakers 4. Headphones 5. Projector 6. Plotter

Four Marks Question:

Q.1. What are the functions of input devices? What are various input devices?
Ans. The main function of input devices is to allow users to enter data into a computer. This data can include text, images, or commands that the computer will use to perform specific tasks. Input devices are an essential part of any computer system, as they allow users to interact with the computer and give it instructions.
There are several types of input devices, including:
Keyboard: a standard input device that is used to type text. It is a rectangular device with several keys that are arranged in a specific layout.
Mouse: an input device that is used to control the movement of a cursor on the screen. It is a small, hand-held device that is moved over a flat surface to control the cursor's movement.
Touchpad: an input device that is built into laptops and some desktops. It is a flat surface that is sensitive to finger movement. It is used to control the cursor's movement, and it can also be used to select and drag objects on the screen.
Scanner: an input device that is used to convert a physical document or image into a digital format. It uses a moving light or a camera to capture an image and then converts it into a digital format that can be stored on a computer.
Microphone: an input device that is used to convert sound into a digital format. It is commonly used for voice recognition and speech-to-text applications.
Digital Camera: An input device that captures images and videos in digital format.
Joystick: an input device that is used to control the movement of a cursor or object on the screen. It is typically used for gaming or other applications that require precise movement control.
Barcode scanner: an input device that is used to read barcodes, which are a series of lines and spaces that represent a specific product or item.

Q.2. What are the functions of processing devices? Write about any two processing device?
Ans. The main function of processing devices is to process data and instructions given by the user or the computer's operating system. They perform mathematical and logical operations on the data, and provide the results in the form of output.
Central Processing Unit (CPU): The CPU is the brain of the computer and is responsible for executing all instructions given to the computer. It is made up of two main components: the control unit, which fetches and decodes instructions, and the arithmetic logic unit, which performs mathematical and logical operations.
Graphics Processing Unit (GPU): A GPU is a specialized processing device that is specifically designed to handle the complex calculations required for rendering images and videos. It is often used in gaming and other graphics-intensive applications to

offload some of the workload from the CPU and improve performance. It is also used in some applications like scientific computing, machine learning and artificial intelligence, etc.

Q.3. What are printers? What are different types of printers?
Ans. Printers are output devices that produce a hard copy of computer-generated documents. They are used to print text, images, and graphics on paper, film, or other mediums.
There are several types of printers, including:
Inkjet printers: These printers use tiny droplets of ink to produce high-quality text and images. They are often used for home and small office use.
Laser printers: These printers use a laser beam to produce text and images on paper. They are fast, efficient, and produce high-quality output, making them suitable for large office use.
Dot-matrix printers: These printers use a print head that moves back and forth across the page, striking an ink-soaked ribbon to produce text and images. They are relatively slow and produce lower quality output than inkjet and laser printers.
3D printers: These printers create three-dimensional objects by building up layers of material, such as plastic or metal. They are increasingly used in manufacturing, prototyping and product development.

Chapter - 4
SOFTWARE CONCEPTS

One marks question:
Q. 1. What is meant by software ?
Ans. Software is a group of programs that solve a specific problem or solves a specific type of job.
Q. 2. Name the broad categories of software.
Ans. Broad categories of software are : (a) Application software (b) System software (c) Utility software.
Q. 3. Name two system software.
Ans. Two system softwares are : Language Translators, Operating System.
Q. 4. Name the most widely used Presentation software.
Ans. MS-Power Point is the most widely used presentation software.
Q. 5. What is MS-Word ?
Ans. Application Software.

Fill in the blanks
1. C language is generally called ……….. level language.
2. …………..programs are platform independent and portable.
3. Interpreters, compiler and …………. are three types of translators.
4. Device drivers serve as a link between …………. and ………… of a computer.
5. Virus checkers, firewalls are considered as …………. software.
Ans. 1. Middle,   2. Java, 3. Assemblers,   4. Device, Operating System,   5. Service

MCQ
1. Software is ....
(a) A group of programs which help in performing operations on the computer
(b) A group of rules given to the computer to do a function
(c) A group of instructions which solve a problem
(d) All of these.
2. Software can be :
(a) Application software   (b) System software   (c) Utility software   (d) All of the above.
3. Operating system is :
(a) An interface between computer and user (b) A communication channel between computer and user
(c) A control for the execution of programs   (d) All of above.
4. Which of these is a category of system software :
(a) Operating system   (b) Word processor   (c) Language Processor   (d) Device driver.
5. .... is required for the proper functioning of a computer system.
(a) Hardware   (b) Software   (c) Both Hardware and Software   (d) None of these.
Ans. 1. (d)   2. (d)   3. (d)   4. (b)   5. (c)

Two Marks Questions:
Q.1. What is software?
Ans. Software refers to a set of computer programs and related data that provide the instructions for telling a computer what to do and how to do it. It is a non-physical component of a computer system that performs various functions and tasks to make hardware work as intended.

Q.2. What is meant by D.O.S?

Ans. DOS stands for Disk Operating System, which is an operating system that was popular in the 1980s and early 1990s. It was used primarily as the primary operating system on personal computers and was known for its simple user interface and command-line interface. Today, it is largely obsolete and has been replaced by newer operating systems such as Windows and Linux.

Q.3. How many users can use DOS operating system?

Ans. DOS operating system is single-user, single-tasking, meaning only one user can use the system at a time and can only perform one task at a time.

Q.4. How many users can use UNIX operating system?

Ans. UNIX is a multi-user operating system, which means multiple users can access and work on the system at the same time.

Four Marks Question:

Q.1. What is an operating system? What are its functions? What are the types of operating system?

Ans. An operating system (OS) is a system software that controls and manages the hardware and software resources of a computer and acts as an interface between the computer user and the hardware.

The main functions of an operating system are:

Resource Management: It manages and allocates the various resources like memory, CPU time, and disk space.

Memory Management: It manages the primary and secondary storage and ensures that the memory is used optimally.

Process Management: It creates and manages the processes that run on the computer and coordinates their execution.

Security: It provides security by controlling access to the system, files and other resources.

The types of operating systems are:

Single-user operating systems: These are designed to support only one user at a time.

Multi-user operating systems: These are designed to support multiple users simultaneously, sharing the computer's resources among them.

Real-time operating systems: These are designed to process data and respond to inputs in real-time, without any delay.

Embedded operating systems: These are designed for specific devices and are integrated into the hardware.

Mobile operating systems: These are designed for mobile devices such as smartphones and tablets.

Q.2. What do you mean by application software? Write any four application software?

Ans. Application software, also known as end-user programs, are computer programs designed to help users perform specific tasks such as word processing, spreadsheet management, database management, and so on. They differ from system software, which is responsible for managing and operating the computer system itself. Four examples of application software are:

1. Microsoft Word - a word processing program
2. Microsoft Excel - a spread sheet program
3. Microsoft Access - a database management program
4. Adobe Photoshop - a graphics editing program

Chapter - 5
MULTIMEDIA CONCEPT AND DEVICES

One marks question:

Q. 1. What is Multimedia ?

Ans. Multimedia is combination of computer based system having more than one type of media. It is a blend of graphics, text, audio, video etc.

Q. 2. Name five multimedia software.

Ans. Multimedia software are : 3D studio, Master Blaster, Photo Paint, Photo Magic, Windows Media Player etc.

Q. 3. What is Multimedia used for ?

Ans. Multimedia used in Entertainment, Education, Communication and Office etc.

Q. 4. Name five devices used for multimedia.

Ans. Five devices used for multimedia are : Headphone, Webcom, Video card, Sound card, Microphones etc.

Q. 5. Name the different formats in which images can be saved.

Ans. Images can be saved in .bmp, .gif, .jpg, .jpeg etc. formats.

Fill in the blanks

1. A digital Audio Player Organise, stores and plays ………… music files.
2. ……………. helps you to translate ready made pictures into an electronic form.
3. ……………….. is a technique to translate spoken words into text.
4. Bitmap images are made up of ………………
Ans. 1. Digital,   2. Scanner,   3. Speech Recognition,   4. Pixels

1. Which of the following is not a multimedia device ?
(a) Microphone   (b) Sound card   (c) CPU (d) Speakers and web camera
2. Which of the following is not a multimedia category :
(a) Creative material   (b) Printing material
(c) Reference material/Reading material   (d) Fun material/Entertainment material.
3. Which of the following is true :
(a) Multimedia market is not showing any improvements   (b) Interactive multimedia kit improves performance
(c) Interactive video is not under the category of multimedia   (d) Software is not needed for multimedia.
4. Headphone are used to :
(a) Attaching to speakers (b) Prevent others from hearing (c) To adjust volume of radio (d) None of these.
5. Paint Brush, Photo shop and Corel Draw are :
(a) Multimedia Hardware (b) Multimedia software   (c) Operating system   (d) All of the above.
Ans. 1. (d)   2. (b)   3. (b)   4. (b)   5. (b)

Two Marks Questions:
Q.1. What is multimedia?
Ans. Multimedia refers to the use of various forms of media, such as text, graphics, audio, and video, to create an interactive and engaging experience for the user. It allows for the integration and manipulation of multiple forms of media to create a more dynamic and engaging presentation.
Q.2. Write any two uses of multimedia?
Ans. Multimedia can be used for entertainment and educational purposes. It can also be used for creating and enhancing multimedia projects, such as presentations, videos, and interactive websites.
Q.3. What are the categories of multimedia?
Ans. The categories of multimedia include:
       1. Audio 2. Video 3. Text   4. Images   5. Animation   6. Interactive media.
Q.4. Write names of some multimedia Softwares?
Ans. Some popular multimedia software include Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Autodesk Maya, Blender, Apple Final Cut Pro X, etc
Four Marks Question:
Q.1. What is multimedia? What are its uses?
Ans. Multimedia refers to the use of multiple forms of media, such as text, audio, images, video, and animation, in a single presentation. It is used to create interactive and engaging content that can be presented in a variety of ways, including on websites, in presentations, and in multimedia applications.

Multimedia has a variety of uses, including:

Entertainment: Multimedia is used to create games, movies, music, and other forms of entertainment.
Education and Training: Multimedia is used to create educational and training materials, such as online courses, tutorials, and presentations.
Advertising and Marketing: Multimedia is used to create advertisements and marketing materials, such as videos, animations, and interactive presentations.
Art and Design: Multimedia is used to create digital art and design, such as digital paintings, illustrations, and animations.
Communication: Multimedia is used to create communication tools, such as video conferencing, instant messaging, and multimedia messaging.

Q.2. What are the requirements of multimedia? Briefly write about different multimedia devices?
Ans. Multimedia refers to a combination of multiple forms of media such as text, audio, images, video, and animation. To use multimedia, certain hardware and software requirements are necessary.
Hardware requirements:
Processor: High-end multimedia applications require a fast and powerful processor.
RAM: Multimedia requires a large amount of memory to handle graphics and video.
Hard Disk: A large hard disk is needed to store multimedia content.
Graphics Card: A graphics card is necessary to display high-quality graphics and images.
Sound Card: A sound card is necessary for audio processing.
Display: A high-resolution display is needed to display multimedia content.
Multimedia Devices:
Digital Cameras: Used for capturing images and videos.
Microphones: Used for recording audio.
Scanner: Used for scanning images and documents.
Speakers: Used for playing audio.
Headphones: Used for listening to audio with better quality.
Graphics Tablets: Used for creating digital graphics and illustrations.
These devices are used to create, edit, and present multimedia content. They play an important role in making multimedia an effective tool for communication, education, and entertainment.

Chapter - 6
INTRODUCTION TO OPERATING SYSTEM

Q. 1. Why is operating system termed as a mediator ?

Ans. It acts as an interface or mediator between the computer hardware and the users of the computer system. Computer can't be anything without an operating system.

Q. 2. What is File Management ?

Ans. File Management means management of files and file related activities such as file organization, storing, naming, sharing and protection of files.

Q. 3. Name five examples of Multi user operating system.

Ans. Examples of Multi user O.S are UNIX, Red Hat Linux, Windows 2000, Solaris etc.

Q. 4. Which is the latest version of MS-Windows ?

Ans. Latest version of MS-Windows is Windows 7.

Q. 5. When was UNIX developed and where ?

Ans. UNIX was developed at AT & T Bell Laboratories in 1970.

Fill in the blanks

1. Operating System is an interface between the **…………** and **……………** of the computer system.
2. Any program in execution is called **…………………**
3. In **…………….** OS only one program can be executed at a time.
4. **………………** OS have two or more than two independent CPUs.
5. Examples of operating system are **………………**.

Ans. 1. Hardware, users, 2. process, 3. single user, 4. Multi Processing, 5. Unix/MS-DOS etc.,

MCQ

1. Which of these is done by the Operating System :
(a) Process Management   (b) File Management   (c) Device Management   (d) All of the above.
2. Which of the following is a single user OS :
(a) MS-DOS   (b) Red Hat Linux   (c) UNIX   (d) WINDOWS 2000.
3. Which type of operating system deals in time slices :
(a) Distributed system   (b) Time sharing system   (c) Real time system   (d) None of these.
4. Which of the following is text based character user interface :
(a) WINDOWS XP   (b) MS-DOS   (c) UNIX   (d) WINDOWS Vista.

Ans. 1. (d)   2. (a)   3. (b)   4. (b)

Chapter - 7
INTRODUCTION TO INTERNET

Q. 1. What is Internet ?

Ans. The Interent is a computer network made up of thousands of networks worldwide.

Q. 2. Expand the acronym IP.

Ans. Internet Protocol.

Q. 3. What is E-Mail ?

Ans. E-mail is the ability to send and receive messages with people throughout the world sitting at different geographical locations.

Q. 4. What is the most important service available through telnet ?

Ans. Telnet allows users to login to any computer in the world and use its resources as if they are sitting at that terminal.

Q. 5. Which option of FTP allows guest users to log on to FTP ?

Ans. The option anonymous allows guest users to log on to FTP.

Fill in the blanks

1. The **………….** is network of networks.
2. ………………   means that the standard allows communication across networks.
3. **……………** is also referred to as a remote login.
4. **……………**is used to transfer files between computers attached to the Internet.
5. **……………**News is an electronic bulletin board system.

Ans.1. Internet,   2. Interoperable, 3. Telnet,   4. FTP, 5. Usenet

MCQ

1. Internet is governed by :
(a) Dishnet   (b) BBB   (c) Microsoft   **(d) None of these.**
2. Internet is used to access information :
(a) within the institute   (b) within the country   **(c) anywhere from the world**   (d) None of these.
3. Internet is used for :
(a) Downloading (b) Uploading   (c) Chatting & communication   **(d) All the above.**
4. Internet enabled computers are helpful in :
(a) Booking and cancellation of railway tickets   (b) Obtaining information regarding time table of trains
(c) Knowing the distance between two stations   **(d) All of the above**
5. Which of the following are the components of Internet :
(a) www & e-mail   (b) FTP & Telnet (c) IRC & Chat   **(d) All of the above**

Ans. 1. (d)   2. (c)   3. (d)   4. (d)   5. (d)

Two Marks Questions:

Q.1. What do you mean by Router?

Ans. A router is a networking device that forwards data packets between computer networks. It determines the best path for data to travel from its source to its destination through the Internet or other computer networks. Routers also provide network security and help manage network traffic. They are commonly used in homes and businesses to provide Wi-Fi access and connect multiple devices to the Internet.

Q.2. What is world wide web?

Ans. The World Wide Web (WWW or Web) is a system of interlinked hypertext documents that are accessed through the Internet. It was invented by Sir Tim Berners-Lee in 1989 and has since become the primary means of accessing information online. The Web is a platform for accessing, sharing, and publishing information and multimedia resources, and it is used by billions of people around the world to communicate, learn, and conduct business. It is a client-server system, where web clients (browsers) request pages or files from web servers, which then respond with the requested content.

Q.3. What is the most important information available through telnet?

Ans. Telnet is a protocol that allows users to connect to remote computers and access their resources, such as databases, files, and applications. The most important information available through Telnet is dependent on the resources and applications that are available on the remote computer being accessed. Typically, Telnet can provide access to information such as system logs, network configurations, and other administrative data that is stored on the remote computer. The specific information available through Telnet will vary depending on the system and the user's access level.

Q.4. What is the use of FTP?

Ans. FTP (File Transfer Protocol) is a standard network protocol used to transfer files from one host to another over a TCP-based network, such as the Internet. FTP allows users to upload and download files, create and delete directories, and perform other file management operations on a remote server. It is commonly used by software developers, web designers, and other professionals who need to transfer large amounts of data between computers. Additionally, FTP is often used to upload and download files to and from websites, allowing users to share and access files over the internet.

Four Marks Question:

Q.1. What is e-mail? Its advantages.

Ans. E-mail (electronic mail) is a digital messaging service that allows users to send text, files, images, and other forms of digital content between computers, mobile devices, and other Internet-enabled devices.

Advantages of e-mail include:

Convenient and fast: e-mail allows users to send and receive messages instantly, regardless of their location, as long as they have access to the internet.

Cost-effective: sending an e-mail is usually free, making it an economical way to communicate with others.

Easy to use: e-mails can be created and sent with a few clicks or taps, and most people find it simple to use.

Archivable: e-mails can be saved, searched, and retrieved, making it easy to find important information.

Easy to share information: e-mails can be forwarded to multiple recipients and can be used to share large files.

Q.2. Explain in detail requirements of internet?

Ans. The requirements of internet access vary depending on the type of device being used, the desired level of functionality, and the location and accessibility of the device. However, in general, the basic requirements of internet access include:

A device capable of connecting to the internet: This can be a computer, smartphone, tablet, or other internet-enabled device.

A reliable internet connection: This can be provided by a broadband or dial-up connection, mobile data, or Wi-Fi. The speed and quality of the connection will determine the level of functionality that is possible.

A web browser: This is software that allows the user to access and interact with websites, online applications, and other internet-based services. Examples of popular web browsers include Google Chrome, Mozilla Firefox, and Apple Safari.

An internet service provider (ISP): This is a company that provides access to the internet by selling internet plans, setting up hardware and software, and providing technical support. ISPs are typically either local phone companies or companies that specialize in providing internet services.

An email account: Email is a popular and convenient way to communicate over the internet, and most ISPs offer email services. To send and receive emails, users will need to sign up for an email account with an email provider, such as Google, Yahoo, or Microsoft.

In addition to these basic requirements, there are many other software applications, tools, and services that can enhance the functionality of the internet, including social media platforms, video conferencing software, cloud storage services, and online gaming platforms.

Chapter - 8
WORKING OF INTERNET

One marks question:
Q. 1. What is Browser ?
Ans. A Browser is a software which acts as an interface between the user and the Internet or WWW.
Q. 2. What are Internet Domains ?
Ans. Internet Domain is the address of a computer, all computers have a domain name.
Q. 3. What are Search Engines ?
Ans. Search Engines are the tools for locating web page, they crawl the web and perform search.
Q. 4. What is meant by Web Index ?
Ans. Web index collects and organises resources which are available via WWW.
Q. 5. What does HTML stands for ?
Ans. Hyper Text Markup language. This language is used for creating web pages.

Fill in the blanks
1. Web pages are prepared using **…………..**
2. A **…………..** acts as an interface between the user and the internet.
3. . **…………….** is a system based on hyper text transfer protocols.
4. Exploring web is generally called **………….**
5. A domain name is the **……………** of a computer.
Ans. 1. HTML,   2. browser,   3. WWW,   4. Net surfing,   5. Internet address,

MCQ
1. A unique numeric identifier between 0 to 255 used to specify the host address is :-
(a) Web index   **(b) IP Adress**   (c) Domain name   (d) None of these.
2. WWW means :
(a) World wide worm   (b) World wise wan   **(c) World wide web**   (d) None of these.
3. URL means :-
(a) Uniform Resource Locator (b) Uniform Resource Loader (c) Ultimate Resource Locator (d) None of these.
4. Which of the following is not a domain name :-
(a) .com   **(b) .wan**   (c) .gov   (d) .net
5. Website is collection of :
(a) Video files   (b) HTML files (c) Audio files   **(d) All of these.**

Two Marks Questions:
Q.1. What is Web?
Ans. The World Wide Web (WWW or Web) is a vast network of information, documents, videos, images, and other resources interconnected through the Internet. It is a system of linked hypertext documents accessed via the Internet, which allows users to access and interact with this information. The Web is based on HTML, which is the standard language used to create and format web pages, and is made possible by web browsers that allow users to access and view these pages.
Q.2. What is hypertext?
Ans. Hypertext refers to the text that contains links to other texts or web pages. It allows users to navigate between pages or documents by clicking on hyperlinks. The links can lead to other web pages, images, videos, or any other type of digital content on the internet. Hypertext allows for non-linear navigation of information and provides a more interactive and dynamic user experience on the web.
Q.3. What do you mean by website?
Ans. A website is a collection of related web pages, including multimedia content, typically identified with a common domain name, and published on at least one web server. It can be used for various purposes, such as providing information, conducting business, or offering entertainment. Websites can be accessed via a web browser on a computer, tablet, or smartphone.
Q.4. What is browser?

Ans. A web browser is a software application that allows users to access, retrieve and view the content of the World Wide Web. It enables users to request and display web pages and other resources available on the internet. Examples of popular web browsers include Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge.

Four Marks Question:
Q.1. What is a search engine? Explain with the help of an example the use of any search engine?
Ans.
A search engine is a tool that enables users to search for information on the Internet. It works by using a database of web pages, images, videos and other online content, which it stores and organizes, and it returns relevant results to the user based on their search query. An example of a popular search engine is Google.

To use a search engine, one simply types a keyword or phrase related to the information they are looking for into the search box. The search engine then uses algorithms to find the most relevant content, such as websites, images, videos, and news articles, and presents them to the user in a list of results. The user can then click on the results to access the information they are looking for. This makes searching for information on the web quick and convenient.

Q.2. Explain the procedure of reading and sending e-mails?
Ans. Reading and sending e-mails typically involves the following steps:

Log in to your e-mail account: To access your e-mail, you need to log in to your e-mail service provider's website, such as Gmail, Yahoo, or Outlook, using your username and password.
Viewing Inbox: Once you have logged in, you will be taken to your Inbox where you will see a list of all the e-mails that you have received.
Reading an email: To read an e-mail, simply click on the e-mail to open it. You can then read the e-mail, including the sender's information, subject, and message.
Replying to an email: To reply to an email, click the "Reply" button. A new e-mail window will open, and you can type your response in the message field. You can also choose to reply to just the sender or to the entire list of recipients.
Composing a new email: To compose a new e-mail, click the "New Message" button. In the new e-mail window, enter the recipient's e-mail address, subject, and message. You can also add attachments if needed.
Sending an email: To send an e-mail, click the "Send" button. The e-mail will be sent to the recipient's e-mail address.
Organizing emails: Most e-mail services have options for organizing your e-mails, such as moving e-mails to different folders, marking e-mails as read or unread, or deleting e-mails.

Chapter - 9
INTRODUCTION TO ELECTRONIC-COMMERCE

One marks question:
Q. 1. What is meant by E-Commerce ?
Ans. E-commerce is the use of electronic transmission media to engage in buying and
selling of goods or services physically or digitally.
Q. 2. What are the various components of E-Commerce that go hand in hand ?
Ans. Components of E-Commerce that go hand in hand are—E-Banking, E-Security, E-Trading,
E-Marketing etc.
Q. 3. What are the various types of E-Commerce ?
Ans. Various types of E-commerce are B2B, B2C, C2C, G2G, G2C, G2E and P2P.
Q. 4. B2B stands for ......
Ans. Business to Business.
Q. 5. C2C stands for .....
Ans. Consumer to consumer.

Fill in the blanks
1. ………….. is the process of doing business online.
2. …………….. allows you to approach even those people who are sitting at the other end of the globe.
3. E-commerce means any kind of commerce, where buyers and sellers interact for goods and services through …………….
4. E-commerce provides Anytime …………….. service.
5. In e-commerce data is not entered at multiple points so it …………..the data errors.
Ans. 1. E-commerce,   2. E-commerce,   3. Internet,   4. anywhere,   5. reduces,

MCQ
1. In E-Commerce, mode of information exchange is :
(a) Via communication network (b) Via physical presence   (c) Both of these (d) None of these
2. E-Commerce includes :
(a) Internet   (b) E-mail   (c) Electronic data interchange   (d) All of these
3. E-commerce includes :
(a) E-banking   (b) E-trading   (c) E-marketing   (d) All of the above
4. Which of the following is not a requirement of E-Commerce?

(a) Internet enabled computer   (b) A website to show the product
(c) A method to receive the payment   (d) A middleman

5. Which of the following is not a type of E-Commerce model:
(a) D2C   (b) B2B   (c) C2C   (d) B2C
Ans. 1. (d)   2. (d)   3. (d)   4. (a)   5. (a)

Two Marks Questions:
Q.1. Define E-Commerce?
Ans. E-commerce refers to the buying and selling of goods and services over the internet, using electronic devices such as computers, smartphones, and tablets. It involves the use of electronic payment systems, electronic data interchange (EDI), and other electronic technologies to facilitate transactions between businesses and customers.

Q.2. What are the types of E-Commerce?
Ans. There are four main types of e-commerce:

B2C (Business-to-Consumer) - Transactions between businesses and consumers
B2B (Business-to-Business) - Transactions between businesses
C2C (Consumer-to-Consumer) - Transactions between consumers through platforms like eBay or Amazon
C2B (Consumer-to-Business) - Transactions where consumers sell goods or services to businesses.

Q.3. What is B2B Commerce?
Ans. B2B (Business-to-Business) Commerce refers to electronic transactions between companies, rather than between a company and individual consumer. It involves the sale of goods, services, or information from one company to another company, through various online platforms such as e-marketplaces, electronic data interchange (EDI) systems, or private websites. B2B e-commerce transactions usually involve larger transactions and higher volumes of goods, and are aimed at improving efficiency, reducing costs, and increasing speed in business dealings.

Q.4. What the meaning of E-Governance?
Ans. E-Governance refers to the use of information and communication technology (ICT) to improve government services and enhance transparency, accountability and citizen engagement in the decision-making process. The goal of e-Governance is to provide citizens with efficient, convenient and accessible public services, as well as to improve the overall effectiveness and efficiency of the government. This is achieved by automating government processes, streamlining communication between citizens and government agencies, and increasing public access to government information and services.

Four Marks Question:

Q.1. Explain four features of e-commerce?
Ans. E-commerce refers to the buying and selling of goods and services through an electronic medium, usually the Internet. The following are the key features of e-commerce:
Convenience: E-commerce offers the convenience of shopping from anywhere, at any time, and with just a few clicks.
Access to a Wider Market: E-commerce opens up opportunities for businesses to reach customers globally, beyond geographical barriers.
Personalization: E-commerce allows businesses to personalize the shopping experience for customers by using data and analytics to suggest products based on their browsing and purchase history.
Cost-effective: E-commerce reduces the cost of doing business as it eliminates the need for physical stores and inventory management.

Q.2. Explain elements of e-commerce.
Ans. The elements of e-commerce are the components that form the foundation of any e-commerce business. These elements are:

Website: The website is the primary channel for an e-commerce business to reach its customers and sell its products or services online.
Shopping Cart: A shopping cart is a software application that enables customers to add products or services to a virtual cart, and then make a payment for the items in the cart.
Payment Gateway: A payment gateway is a secure platform that enables merchants to process payments from customers. This is a critical component for e-commerce businesses, as it ensures the safe and secure transfer of funds between the customer and the merchant.
Inventory Management System: An inventory management system is a software tool that helps e-commerce businesses manage their stock levels and product information. This system helps businesses keep track of products, manage stock levels, and monitor sales trends.
Delivery and Logistics: A reliable and efficient delivery and logistics system is crucial for e-commerce businesses, as it enables them to fulfill orders and get products to customers quickly and cost-effectively.

These elements are essential for building an effective e-commerce platform, and they play a key role in driving sales and building customer loyalty.

Chapter - 10
E-COMMERCE IN INDIA

Q. 1. What is I.T. Act of 2000 ?
Ans. I.T. Act 2000 provides a legal frame work for conducting e-commerce, all documents which are used via electronic means are termed as legal.

Q. 2. What role do digital signatures play in relation to E-commerce ?
Ans. Digital Signatures are now authenticated. The sender can't deny sending and the receiver can't deny receiving. Integrity must be mentioned.

Q. 3. Name two major problems of E-commerce in India.
Ans. (1) Non Availability of Professionals (2) Lack of awareness

Q. 4. What is trade mark issue involved in E-commerce ?
Ans. Trademark is the use of a certain label/symbol on a product, once the trademarks are got registered by the manufacturer, no other manufacturer or person can use that.

Fill in the blanks

1. ……………. is the business process of selling various goods and services over internet.
2. Digital signatures are used to …………… the sender of the message.
3. …………… converts data into a coded form.
4. A …………. is an agreement made between two or more persons.

Ans. 1. E-commerce,   *2. authenticate,*   *3. Encryption,*   *4. Contract*

MCQ

1. Which of the following is true about E-Commerce in India ?
(a) RBI is not taking any initiative   (b) Government of India has not made any law
(c) E-Commerce is in its early days-things are not very clear about legal and other aspects
(d) None of these.
2. Status of E-Commerce in India can best be explained by :
(a) E-Records   (b) Encryption   (c) Security   (d) All the above.
3. Following comes under the domain of I.T. Act 2000 :
(a) Cyber laws   (b) Protection of Web   (c) Privacy and Confidentially   (d) All the above.
4. E-Commerce in India has resulted in :
(a) Inter and Intra business communication   (b) Development of E-content
(c) Both of these   (d) None of these.

Ans. 1. (c)   2. (d)   3. (d)   4. (c)

Two Marks Questions:

Q.1. Discuss any two problems of e-commerce in India?
Ans. There are several problems that the e-commerce industry faces in India, some of which are as follows:
Lack of trust: One of the major problems of e-commerce in India is the lack of trust among customers towards online transactions. Many people are still not comfortable making online payments or sharing their personal and financial information on the internet due to concerns over security and privacy.
Logistics and infrastructure: Another challenge for e-commerce in India is the poor logistics and transportation infrastructure. The country's vast geography and inadequate infrastructure can lead to delays in delivery and high costs for logistics, making it difficult for e-commerce companies to provide timely and cost-effective services.

Q.2. What are security threats in the field of E-business?
Ans. Security threats are potential risks that can affect the confidentiality, integrity, and availability of data and systems in e-business. Some common security threats in the field of e-business include:
Malware and viruses: Malware and viruses can be injected into systems, websites or software to damage, disrupt or steal information.
Phishing and social engineering: Phishing attacks involve tricking users into revealing confidential information like passwords, credit card numbers or bank account details. Social engineering techniques can be used to gain access to secure areas or systems.
Denial-of-service attacks: These attacks are designed to overload servers, networks or websites to render them unusable.
Identity theft: Hackers can steal personal information to gain access to financial accounts, commit fraud or other criminal activities.

Q.3. Enlist any two factors which drive e-commerce in India?
Ans. Here are four factors that drive e-commerce in India:
Increasing internet penetration: India has a rapidly growing internet user base, which is expected to reach over 900 million users by 2025. This increase in internet users has led to a rise in online shopping.
Growing smartphone adoption: India is one of the largest markets for smartphones in the world. The growth of affordable smartphones has made it easier for people to access the internet and shop online.

Q.4. What is violation of copy right?

Ans. Violation of copyright refers to the unauthorized use of a creative work protected by copyright law without the permission of the copyright owner. This can include copying, reproducing, distributing, displaying, performing, or creating a derivative work based on the original work without obtaining proper authorization or licensing. Copyright infringement can result in legal action, including lawsuits and fines, and damages can be awarded to the copyright owner for any harm caused by the infringement.

Four Marks Question:

Q.1. Explain four Legal issues involved on e-commerce?

Ans. E-commerce has brought about new business opportunities and expanded the reach of traditional businesses, but it also raises various legal issues that need to be addressed. Some of the legal issues involved in e-commerce are as follows:

Contract Formation: E-commerce transactions often involve electronic contracts. The Indian Contract Act, 1872, applies to these transactions, but there are unique challenges to determining when a contract is formed in the digital world. There are also questions about the validity and enforceability of electronic signatures.

Intellectual Property Rights (IPR): E-commerce platforms have raised questions about the protection of intellectual property rights, such as patents, trademarks, and copyrights. E-commerce websites must ensure that they are not infringing on the IPR of others, and they must also protect their own IPR.

Data Protection and Privacy: E-commerce platforms collect a lot of personal data from users, such as names, addresses, and payment details. There are laws in India, such as the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011, which require companies to take measures to protect this data.

Cybersecurity: E-commerce platforms are vulnerable to cyberattacks, such as hacking, phishing, and malware. These attacks can compromise user data and disrupt business operations. E-commerce companies must take measures to protect their platforms and user data.

Q.2. Explain four opportunities of E-commerce in India?

Ans. E-commerce in India has grown significantly in recent years due to increasing internet penetration and digitalization.
Opportunities:
Large Market: India has a huge consumer market with a growing middle class population. E-commerce companies can leverage this large market to expand their customer base and grow their business.
Digitalization: With the rapid digitalization of India, more people are getting online and using digital services. This presents an excellent opportunity for e-commerce companies to reach out to a wider audience and promote their products and services.
Innovation: E-commerce companies can tap into the innovative and entrepreneurial spirit of India to create unique products and services that cater to the needs of the Indian market. This can help them stand out from their competitors and grow their business.
Cost Effective: E-commerce is generally more cost-effective than traditional brick-and-mortar retail. This means that e-commerce businesses can offer competitive prices and still maintain a healthy profit margin.

Chapter - 11
E-PAYMENT

One marks question:
Q. 1. What do you mean by E-Payment?
Ans. E-payment may be defined as the transfer of funds using electronic media like personal computers, servers and mobile phones.
Q. 2. What is EFT?
Ans. EFT means Electronic Fund Transfer.
Q. 3. Which methods come under the umbrella of Post-Paid-System ?
Ans. The categories of payment like credit cards, cyber cash and internet cheques come under the umbrella of Post Paid Methods.
Q. 4. What is Pin ?
Ans. Pin is Personal Identification Number.
Q. 5. What are E-Cheques ?
Ans. E-cheques are like ordinary cheques, but these are initiated electronically. These use digital signatures for signing and endorsing.

Fill in the blanks

1. Electronic Payment system may be …………. payment system or ……………payment system.
2. ………….. and …………… are types of E-Payment system.
3. In case of loss of credit card ……………… must be lodged.
4. …………….. is a system where by customers pay by credit card without disclosing the credit card number.
5. The authentication aspects are supported through digital signatures using ………… cryptography.

Ans. 1. Debit, Credit 2. Post-paid, Instant Paid, Pre-paid system, 3. FIR, 4. Cyber cash, 5.public-key,

MCQ
1. E-Payment refers to the transfer of funds via internet using electronic means such as :

(a) Mobile Phone   (b) PDA (c) Desktop computer   (d) All the above

2. Methods of E-Payments are :

(a) Post Paid   (b) Pre-Paid   (c) Both of these   (d) None of these

3. With E-Payment systems, we can :

(a) Pay bills instantly   (b) Make purchases   (c) Both of the above   (d) None of these

4. E-Payment does not involve :

(a) Cash   (b) Cheques   (c) Both of these   (d) None of these

5. A credit card holder is capable of making purchases :

(a) On Internet/online   (b) Shopping Malls/shops (c) Both of these (d) None of these

Ans. 1. (d)   2. (c)   3. (c)   4. (c)   5. (c)

Two Marks Question:

Q.1. What is EPS?

Ans. EPS stands for Electronic Payment System. It is a payment gateway service provided by the Korean government to allow electronic transactions securely and conveniently. EPS enables consumers to use debit and credit cards to make online purchases from local and international merchants in South Korea. The system is regulated by the Financial Supervisory Service (FSS) of Korea and offers features such as real-time payment confirmation, multi-language support, and protection against fraud.

Q.2. What is Debit card?

Ans. A debit card is a payment card that is linked to a bank account and is used to make purchases or withdraw cash. When a purchase is made using a debit card, the funds are immediately deducted from the linked bank account. This is different from a credit card where the bank extends a line of credit to the cardholder, and the cardholder incurs debt when using the card. Debit cards can be used at ATMs, in stores, or online, and are a convenient and secure way to access and spend the money in one's bank account.

Q.3. What do you understand by e-cheque?

Ans. An e-cheque, also known as an electronic cheque or digital cheque, is an electronic version of the traditional paper cheque. It is a type of digital payment system that allows users to transfer funds between bank accounts online. The e-cheque system works by replacing the paper cheque with an electronic representation of the same information. The sender of the e-cheque enters the recipient's account details and the amount of money to be transferred, and the e-cheque is then processed electronically.

Q.4. What do you mean by smart card?

Ans. A smart card is a type of card that contains an embedded microprocessor chip that can store and process data. It looks like a standard plastic credit or debit card and is commonly used for electronic transactions. Smart cards can be used to store various types of information such as personal identification details, medical information, financial information, and more.

Four Marks Question:

Q.1. What are popular e- wallet options available in India?

Ans: There are several popular e-wallet options available in India. Some of the most popular ones include:

Paytm: Paytm is one of the most widely used e-wallets in India, offering users the ability to make payments, recharge their mobile phones, pay utility bills, book movie tickets, and more.

PhonePe: PhonePe is another popular e-wallet that enables users to send and receive money, recharge mobile phones, pay utility bills, and book travel tickets, among other things.

Google Pay: Google Pay is a widely used e-wallet that enables users to make payments, transfer money, recharge mobile phones, pay utility bills, and more.

Amazon Pay: Amazon Pay is a digital wallet offered by Amazon that enables users to make payments, recharge mobile phones, and pay utility bills.

MobiKwik: MobiKwik is a popular e-wallet that enables users to make payments, recharge mobile phones, pay utility bills, book travel tickets, and more.

These e-wallet options provide users with a convenient way to make cashless transactions and can be easily linked to bank accounts, credit cards, or debit cards for seamless transactions.

Q.2. What are for features of e-cheque ?

Ans. An e-cheque (electronic cheque) is a digital version of a traditional paper cheque that can be used to transfer funds electronically between two parties. It is essentially an electronic payment order that instructs the payer's bank to transfer funds to the payee's bank.

Some of the key features of e-cheques include:

Digital format: E-cheques are created and transmitted in digital format, eliminating the need for physical paper checks.

Security: E-cheques use advanced security features such as digital signatures, encryption, and authentication protocols to ensure the integrity and confidentiality of the transaction data.

Convenience: E-cheques offer a convenient and fast way to transfer funds between parties, without the need for physical transportation of the cheque.

Cost savings: E-cheques are typically less expensive than paper cheques, as they eliminate the costs associated with printing, mailing, and processing physical cheques.

Chapter - 12
E-SECURITY

One marks question:

Q. 1. What is Electronic Security ?
Ans. E-Security is use of adequate methods/precautions to protect user's data and systems.

Q. 2. What is Physical risk ?
Ans. Physical risk refers to the physical danger caused to equipments like floods, theft and fire etc.

Q. 3. What is Technical risk ?
Ans. Technical risk includes unauthorised access, frauds and virus attacks etc.

Q. 4. What is Encryption ?
Ans. Encryption is the process of encoding the data, different algorithms are available to encrypt the message.

Q. 5. What are the types of Encryption ?
Ans. Types are Public Key Encryption and Private Encryption.

Fill in the blanks

1. Encryption technology ensures that only ………….. users can read encrypted message.
2. …………..works like a door lock so that only authorized users can enter in the organisations network.
3. ………………….. provide the method by which information cannot be repudiated.
4. …………….. means giving permission or denying the permission for a particular thing.
5 …………. is the solution through which only the authorised persons can view the data.

Ans. 1. authorized, 2. Firewall, 3. Digital signatures, 4. Access Control, 5. Cryptography,

MCQ

1. Hackers are those :
(a) Who have authorised access to data   (b) Who have unauthorised access to data
(c) Who have special access to data   (d) None of these.
2. The Potential customer wants his data to be :
(a) Safe   (b) Secure   (c) Confidential   (d) All of these
3. Main security concerns are :
(a) Privacy & confidentiality   (b) Data integrity (c) Authenticity   (d) All of the above
4. Cryptography changes the data in :-
(a) Readable form   (b) Unreadable form   (c) Both of these (d) None of these.
5. Cipher text becomes ready after :
(a) Encryption   (b) decryption   (c) Digital signature   (d) None of these

Ans. 1. (b)   2. (d)   3. (d)   4. (c)   5. (a)

Two Marks Questions:

Q.1. What do you mean by internet security?
Ans: Internet security refers to the protection of internet-connected systems, including hardware, software, and data, from threats such as cyber-attacks, malware, viruses, and unauthorized access. It involves the use of various security measures, protocols, and technologies to ensure the confidentiality, integrity, and availability of information on the internet. Internet security aims to prevent data breaches, identity theft, and other types of cybercrime by safeguarding the internet infrastructure and protecting users from various online threats.

Q.2. What are two main techniques of internet security?
Ans: There are several techniques used in internet security to protect against various threats, some of which include:
Firewalls: Firewalls are used to monitor and filter network traffic to prevent unauthorized access to a network or computer system.
Antivirus and Anti-malware software: These programs are used to detect and remove viruses, malware, and other malicious software from a computer or network.

Q.3. What are the two benefits of fire wall?
Ans: A firewall provides several benefits for internet security, including:
Network security: Firewall provides network security by preventing unauthorized access to the network, thus protecting against hackers and other cyber threats.
Access control: Firewalls can limit access to certain websites, applications, or services, reducing the risk of data theft or damage.

Q.4. What do you mean by cryptography?
Ans: Cryptography is the practice of secure communication in the presence of third parties. It is the technique of converting original plaintext into coded or ciphered text through the use of encryption algorithms and keys. Cryptography is used to ensure the confidentiality, integrity, and authenticity of data being transmitted or stored. It involves techniques such as encryption, decryption,

digital signatures, and key exchange, which help to protect sensitive information from unauthorized access and ensure that it can be transmitted securely over insecure communication channels such as the internet.

Four Marks Question:

Q.1. Define the breach of security. Explain the areas of internet security.

Ans: **Breach of Security:** A breach of security refers to an incident where an unauthorized individual or entity gains access to sensitive information, systems, or networks. This can occur due to a variety of reasons, including human error, system vulnerabilities, or malicious attacks. A breach of security can result in data theft, damage to computer systems, and financial losses.

Areas of Internet Security: Internet security involves protecting computer systems, networks, and data from unauthorized access, use, modification, or destruction. The areas of internet security include:

a. Network Security: This involves protecting the computer network from unauthorized access, viruses, and other threats. Network security measures may include firewalls, intrusion detection systems, and antivirus software.

b. Application Security: This involves securing the applications that run on computer systems, including web applications, email applications, and other software. Application security measures may include access controls, encryption, and authentication.

c. Information Security: This involves protecting the confidentiality, integrity, and availability of information stored on computer systems or transmitted over networks. Information security measures may include encryption, access controls, and backup and recovery systems.

d. Endpoint Security: This involves securing the devices that access the network, including laptops, desktops, and mobile devices. Endpoint security measures may include antivirus software, encryption, and remote wiping capabilities.

e. Cloud Security: This involves securing data and applications that are hosted in the cloud. Cloud security measures may include access controls, encryption, and intrusion detection systems.

f. Social Engineering: This involves the use of psychological manipulation to deceive individuals into revealing sensitive information or performing actions that are not in their best interest. Social engineering attacks may include phishing, pretexting, and baiting.

g. Physical Security: This involves securing the physical infrastructure of computer systems, including servers, routers, and other network components. Physical security measures may include access controls, video surveillance, and security guards.

All these areas of internet security are interconnected, and a comprehensive approach to internet security is required to protect against security breaches and ensure the safety and security of computer systems, networks, and data.

Q.2. What are the ways to authenticate a person?

Ans. There are several ways to authenticate a person, including:

Passwords: The most common form of authentication, passwords are a string of characters that are known only to the user and the system.

Biometrics: This involves using unique physical or behavioral characteristics of an individual, such as fingerprints, facial recognition, voice recognition, and retinal scans.

Tokens: These are physical devices, such as smart cards, that a user carries with them and uses to authenticate their identity.

Multi-factor authentication: This involves combining two or more forms of authentication to provide greater security. For example, a system might require a password and a fingerprint scan to authenticate a user.

Certificates: These are digital certificates issued by trusted third parties that provide proof of identity.

Security questions: These are questions that only the user would know the answer to, such as the name of their first pet or their mother's maiden name.

One-time passwords: These are passwords that are valid for only one use, typically generated by a token or a mobile app.

The choice of authentication method depends on the level of security required and the user's preferences and convenience.

Chapter - 13
E-BANKING

One marks question:

Q. 1. Define Electronic Banking.

Ans. E-Banking means use of electronic technology to various banking transactions/
operations such as cash receipts, payments and transfer of funds etc.

Q. 2. Expand term EDI.

Ans. Electronic Data Interchange.

Q. 3. What does ATM stands for ?

Ans. Automatic Teller Machine.

Q. 4. Why is ATM called Any time Money ?

Ans. ATM is called Any time money because we can withdraw money any time $24 \times 7 \times 30$.

Q. 5. What is Credit Card ?

Ans. Credit card is an online method of payment. Basically it is a plastic card issued by the
Banks. it is issued on the basis of creditability of the card holders. The cutomers can make
payment from credit card.

Fill in the blanks

1. Banking on net is known as ....
2. ATM include ....,.............. and …………… etc.
3. Digi Cash was started in …………………….

4. A **………………** is a promise to pay later.

5. **………………** allow you to on-line bill payments.

Ans. 1. E-Banking, 2. Cash Withdrawal, PIN change, Balance enquiry, 3. 1994, 4. Credit Card, 5. Internet Banking

MCQ

1. E-Banking provides banking services :

(a) During the normal banking hours   (b) 24 hours 7 days a week   (c) Both of the above   (d) None of these.

2. E-Banking makes use of :

(a) ATMs   (b) POS   (c) Telephone Banking   (d) All of these.

3. E-Banking is :-

(a) Based on cash   (b) Cash and cheque both (c) Cash less   (d) None of these.

4. ATMs enable the user for :

(a) Balance Enquiry   (b) Mini statement of Accounts   (c) Withdrawls   (d) All of these.

5. Tele banking is a banking service provided during :

(a) The normal working hours   (b) 24 × 7 days   (c) Only on holidays   (d) None of these

Ans. 1. (b) 2. (d) 3. (c) 4. (d) 5. (a)

Two Marks Questions:

Q.1. What is the meaning of e-banking?

Ans. E-banking, also known as online banking or internet banking, refers to conducting banking transactions over the internet using a computer or mobile device. E-banking allows customers to perform a variety of financial transactions, such as checking account balances, transferring funds between accounts, paying bills, and applying for loans or credit cards, without having to physically visit a bank branch. It provides convenience, flexibility, and 24/7 accessibility to customers, while also reducing costs for banks. E-banking is an important aspect of the digital revolution in the banking industry.

Q.2. What is traditional banking ?

Ans. Traditional banking refers to the traditional way of conducting banking transactions, which primarily involves face-to-face interactions between the customers and the bank staff. This method of banking relies heavily on physical branches, and customers are required to visit the bank in-person to carry out various transactions such as deposits, withdrawals, opening accounts, and applying for loans. Traditional banking also involves the use of paper-based methods for recording and processing transactions. It has been the predominant mode of banking for several decades, but in recent years, with the widespread use of the internet and mobile phones, electronic banking has emerged as a viable alternative to traditional banking.

Q.3. Give any two differences between traditional banking and e-banking ?

Ans. Here are two differences between traditional banking and e-banking:

Accessibility: Traditional banking requires customers to physically visit a bank branch during working hours, while e-banking allows customers to access banking services and perform transactions anytime and anywhere through the internet or mobile devices.

Human interaction: Traditional banking offers personal interaction with bank staff, while e-banking relies on technology and lacks face-to-face interaction.

Q.4. Write any two advantages of e-banking?

Ans. Two advantages of e-banking are:

Convenience: E-banking provides customers with the convenience of accessing their bank accounts and conducting transactions anytime and anywhere through the internet. Customers do not have to physically visit a bank branch or wait in long queues to perform banking tasks.

Cost Savings: E-banking allows banks to reduce their operating costs by minimizing the need for physical infrastructure and human resources. This, in turn, can lead to cost savings for the banks, which they can pass on to their customers in the form of lower fees and charges.

Four Marks Question:

Q.1. what are main limitations of E-Banking?

Ans. There are several limitations of e-banking, including:

Limited Access: E-banking requires a computer or smartphone and internet access, which may not be available to everyone. This limits the reach of e-banking services to only those who have access to the required technology.

Security concerns: E-banking involves the transmission of sensitive personal and financial information over the internet, which can make customers vulnerable to cyber attacks and fraud. Security breaches and identity theft can have serious financial consequences.

Technical glitches: Technical glitches such as server crashes or system downtime can occur, causing inconvenience to customers and affecting their trust in e-banking services.

Low level of awareness: Many people may not be aware of the benefits and risks of e-banking, which can make them hesitant to use such services.

Lack of personal touch: E-banking lacks the personal touch that traditional banking provides, which some customers may prefer. They may prefer interacting with a human being rather than a computer screen.

Q.2. What are the services offered in e-banking?

Ans. Services offered in e-banking include:

Account management: Customers can view account balances, transaction history, and account statements online.
Fund transfers: Customers can transfer money between accounts, pay bills, and make online purchases.
Deposits and withdrawals: Customers can deposit and withdraw funds using online banking services.
Loan and credit card applications: Customers can apply for loans and credit cards online.
Investment services: Customers can manage their investments, including buying and selling securities and managing their portfolio.

Chapter - 14
E-TRADING

One marks question:
Q. 1. What is meant by E-Trading ?
Ans. E-trading is the process of trading using Internet and of course computers to place
orders for buying and selling with on-line brokerage firms.
Q. 2. How many depositories are there in India ?
Ans. There are two depositories in India.
Q. 3. What is BOLT ?
Ans. BSE's on-line trading system is called BOLT.
Q. 4. What is Dematerialisation ?
Ans. It is the process of conversion of physical form of shares into electronic form.
Q. 5. Do you think that securities move physically in E-Trading ?
Ans. No, securities do not move physically in E-Trading.

Fill in the blanks
1. ……………… is the service offered on Internet for the sale and purchase of shares, stocks etc.
2. ……………… provide comparison shopping.
3. SSL stands for ………………
4. BSE developed Online Trading System in ……………..
5. Encryption is used through ……………

Ans. 1. E-Trading,   2. E-brokers,   3. Secure Socket Layer,   4. 1995, 5. SSL,

MCQ
1. E-Trading is :
(a) Trade of stocks/bonds   (b) Trade of Foreign currency
(c) Both of the above   (c) None of the above.
2. Online trading is a service offered on the internet for the purchase and sale of:
(a) goods   (b) services   (c) securities   (d) None of these.
3. In E-Trading, Sale and purchase of securities happens on :
(a) Internet   (b) The building of stock exchange (c) Both of these   (d) None of these.
4. Which is not required in E-Trading :
(a) Internet enabled computer   (b) A demat account with a depository
(c) Registration with e-broker   (d) Direct interaction of investor and e-broker.
5. Who can deal in E-securities ?
(a) A firm   (b) An individual   (c) A corporate house   (d) All the above

Ans. 1. (c)   2. (c)   3. (a)   4. (d)   5. d

Two Marks Questions:
Q.1. What is meaning of e-trading?
Ans. E-trading refers to the buying and selling of financial instruments such as stocks, bonds, currencies, and commodities through electronic or online platforms. E-trading platforms use advanced technology and software to provide investors with real-time market data, trading tools, and analytics, enabling them to trade from anywhere, at any time, using a computer or mobile device connected to the internet. E-trading has revolutionized the way financial markets operate by making trading more accessible, efficient, and cost-effective.

Q.2. What is traditional trading?
Ans. Traditional trading refers to the practice of buying and selling financial instruments, such as stocks, bonds, and commodities, through physical exchanges, such as stock markets, commodity markets, and currency exchanges. In traditional trading, traders have to physically visit the exchange or trading floor to buy or sell financial instruments. The process involves paper-based transactions, long waiting periods, and high transaction costs. It is also known as floor trading or manual trading.

Q.3. Write is any two differences between traditional trading and e-trading.
Ans. Here are two differences between traditional trading and e-trading:
Execution: In traditional trading, orders are executed through phone calls, emails, or in-person communication with a broker, whereas in e-trading, orders are executed electronically through online platforms.

Speed: E-trading offers faster order execution and settlement times compared to traditional trading, which can be slower due to manual processes and physical document handling. E-trading also provides real-time market data and analysis, which can aid traders in making quick decisions.

Ans. Two benefits of e-trading are:
Convenience: E-trading allows investors to trade from the comfort of their own home or office at any time of the day. This eliminates the need for physical travel to a traditional broker's office, saving time and money.
Lower transaction costs: E-trading often results in lower transaction costs as it eliminates the need for a traditional broker to physically execute trades. This means that investors can save on brokerage fees and other related charges.

Four Marks Question:
Q.1. Write any four benefits of e-trading.
Ans. Here are four benefits of e-trading:
Convenience: One of the most significant benefits of e-trading is its convenience. Investors can access their trading accounts from anywhere, at any time, as long as they have an internet connection. This means they don't have to physically visit a broker or exchange to execute trades.
Lower costs: E-trading has lower costs compared to traditional trading because it eliminates the need for middlemen and physical paperwork. Investors can execute trades online with lower transaction fees, reducing the overall cost of trading.
Increased transparency: E-trading offers increased transparency as investors can track their investments in real-time. This allows them to make informed decisions about buying or selling shares, and they can view all details of their transactions and holdings at any time.
Faster transaction speeds: E-trading offers faster transaction speeds as orders are processed electronically, eliminating the need for manual processing. This means that trades can be executed quickly, reducing the risk of price changes and improving the overall efficiency of trading.

Q.1.What are the limitations of e-trading?
Ans. Here are four limitations/features of e-trading:
Dependence on technology: E-trading relies heavily on technology, which can sometimes malfunction or be vulnerable to cyber-attacks, leading to financial losses or compromised security.
Lack of personal interaction: Unlike traditional trading, e-trading is entirely digital, and there is no personal interaction with brokers or other traders. This can lead to a lack of guidance or support, especially for novice traders.
Risk of misinformation: E-trading platforms offer a vast amount of information, but not all of it may be reliable or up-to-date. Traders need to be discerning and have a good understanding of the market to make informed decisions.
Potential for market volatility: The speed and efficiency of e-trading can sometimes exacerbate market volatility, leading to sudden price swings and losses for traders. This can be particularly challenging for those who engage in high-frequency trading.

Chapter - 15
E-MARKETING

One marks question:
Q. 1. What do you mean by E-Marketing ?
Ans. ''E-marketing is marketing that utilises the Interactive Internet as communication, transaction and distribution channel. This also includes e-mail and web.'
Q. 2. Write the names of various channels of E-Marketing ?
 Ans. Communication channel, Transaction channel and Distribution channel are the various channels.
Q 3. Write the names of four P's related to E-Marketing ?
Ans. Product, Price, Place and Promotion are the four P's.
Q. 4. What are the types of products related to E-Marketing ?
Ans. Products related to E-Marketing are Physical Products and Service Products.
Q. 5. What is meant by Pricing ?
Ans. Pricing means determining Price to be charged for a product.

Fill in the blanks
1 ……………. is marketing that utilises the interactive internet.
2. …………… is referred to as distribution or outbound logistics.
3. Internet marketing follows ………… guidelines.
4. Internet marketing techniques are considered to be ……….. if they require visitors to seek out the site.
5. E-marketing follows ………… production technique.

Ans. 1. E-marketing,   *2. Place,*   *3. AIDA,*   *4. Passive,*   *5. Just in time,*

MCQ

1. E-Marketing does not involve :
(a) Big Malls/outlets   (b) Whole sellers   (c) Retailers   **(d) All the above.**
2. E-Marketing serves as the following :
(a) Distribution channel   (b) Communication channel   (c) Information channel **(d) All of the above.**
3. Which of the following is not a part of e-marketing ?
(a) Product   (b) Place   **(c) Producer**   (d) Price.

4. Which of the following is true about the extent of E-Marketing ?
(a) Local Coverage   (b) National Coverage   **(c) Global Coverage**   (d) None of these.

5. Which of the following is required for e-marketing deals ?
(a) Television   **(b) Internet**   (c) Magazines   (d) None of these.

Ans. 1. (d)   2. (d)   3. (c)   4. (c)   5. (b)

Two Marks Questions:

Q.1. Give two features of E-Marketing?
Ans. Two features of E-Marketing are:
Global reach: E-Marketing allows businesses to reach a global audience through various digital channels such as social media, search engines, email, and websites. This helps businesses to expand their customer base beyond geographical boundaries.
Personalization: E-Marketing enables businesses to personalize their marketing messages according to the preferences and behaviors of individual customers. This helps to increase customer engagement and loyalty.

Q.2. Explain the two factors which affect pricing decisions?
Ans. There are several factors that affect pricing decisions. Some of them are:
Cost of production: The cost of production is one of the major factors that affects pricing decisions. The price of a product should at least cover the cost of producing it, including the raw materials, labor, and overhead expenses.
Competition: The level of competition in the market also affects pricing decisions. If there are several competitors selling similar products, the business may have to price its product competitively to attract customers.

Q.3. Explain any two advantages of e-marketing?
Ans. Two advantages of e-marketing are:
Global Reach: E-marketing allows businesses to reach a global audience with ease. With the internet, businesses can reach consumers in any part of the world, and promote their products and services to a wider audience. This is particularly useful for businesses that offer digital products or services, as they can be easily accessed from anywhere in the world.
Lower Costs: E-marketing is generally more cost-effective than traditional marketing methods. Many digital marketing techniques, such as social media marketing, email marketing, and search engine optimization, can be done at a relatively low cost. This is particularly beneficial for small businesses and startups, who may not have a large marketing budget, but still need to reach their target audience effectively.

Q.8. Explain the packages with regard to e-marketing?
Ans. In the context of e-marketing, packages refer to the combination of different products or services offered by a company as a bundle. These packages are designed to offer customers a convenient and cost-effective way to purchase multiple products or services at once.

There are different types of packages that can be offered in e-marketing, such as:
Product packages: This type of package combines different products that are sold as a set. For example, a technology company may offer a package that includes a laptop, a tablet, and a printer.
Service packages: This type of package combines different services that are sold as a set. For example, a travel company may offer a package that includes flight tickets, hotel accommodations, and transportation services.
Hybrid packages: This type of package combines both products and services that are sold as a set. For example, a fitness company may offer a package that includes gym equipment and personal training services.

Four Marks Question:

Q.1. Explain 5P's of E-Marketing.
Ans. The 5 P's of e-marketing are a set of fundamental marketing principles that are specific to the digital realm. These principles are similar to the traditional marketing mix, also known as the 4 P's (Product, Price, Place, and Promotion), but with the addition of one more P: Personalization.

Here are the 5 P's of e-marketing in more detail:
Product: This refers to the digital products or services that a company is offering, such as software, mobile apps, e-books, or online courses. Companies need to ensure that their digital products meet the needs and expectations of their target audience.
Price: This refers to the monetary value that a customer pays for a digital product or service. Companies need to consider factors such as production costs, competitive pricing, and the value that their product provides to the customer when setting prices.

Place: This refers to the distribution channels used to deliver digital products or services to customers, such as websites, social media, email marketing, or mobile apps. Companies need to ensure that their products are easily accessible to their target audience and are available through various channels.

Promotion: This refers to the marketing efforts used to promote digital products or services, such as online advertising, social media marketing, content marketing, or influencer marketing. Companies need to create a marketing strategy that resonates with their target audience and generates interest and engagement with their products.

Personalization: This refers to tailoring digital products or services to the specific needs and preferences of individual customers. This can be achieved through personalized content, personalized product recommendations, or personalized marketing messages. Companies need to use customer data and analytics to create a personalized experience for their customers and build long-term relationships.

Q.2. What are the disadvantages of E-marketing?

Ans. While e-marketing offers many advantages over traditional marketing, there are also some disadvantages that businesses need to consider. Here are some of the key disadvantages of e-marketing:

Competition: With so many businesses now using digital marketing channels, competition for attention is high. It can be difficult for smaller businesses to stand out and get noticed in a crowded marketplace.

Technical issues: E-marketing relies on technology, which can be prone to technical issues such as website downtime or email delivery problems. These issues can disrupt marketing campaigns and lead to lost sales and revenue.

Data privacy concerns: E-marketing involves the collection and use of customer data, which can raise privacy concerns. If businesses misuse or mishandle customer data, it can damage their reputation and lead to legal and financial penalties.

Dependence on technology: E-marketing relies heavily on technology, which can be vulnerable to hacking, malware, or other security issues. If a business's digital marketing channels are compromised, it can lead to data breaches, financial losses, and reputational damage.

Customer trust: Some customers may be wary of e-marketing, particularly if they have concerns about data privacy or the reliability of online transactions. Building trust with customers can be more challenging in a digital environment.