

ASSIGNMENT-COMPUTER SCIENCE

CLASS – 12TH

CHAPTER – 1

OFFICE AUTOMATION & TYPING

Que:1 Multiple Choice Questions:

1. _____ is word processor software.
 a. MS Window b. MS Excel c. MS PowerPoint **d. MS Word**
2. To check spelling and grammar _____ key is used.
 a. Ctrl+F7 b. Alt+F7 **c. F7** d. Shift F7
3. _____ option in Word changes the structure and layout of pages.
 a. Format b. Print and Print Preview **c. Page Setup** d. Proofing
4. _____ is an electronic spread sheet software used for automated calculations.
 a. MS Window **b. MS Excel** c. MS PowerPoint d. MS Word
5. _____ refers to changing the font style, size, color, bold, italic, underline and other related parameters.
a. Formatting b. Alignment t c. Proofing d. Filtering

Que:2 Fill in the Blanks:

1. _____ and _____ Functions used to find the minimum and maximum value in a range.
2. Filter option is available in _____ tab of Excel.
3. If the cursor is placed at the end of the file, then _____ button is pressed to delete the text.
4. Two options of orientations for page setup are _____ And _____
5. _____ Symbol is used to start any formula (function) in excel calculations.

Ans: 1. MIN, MAX 2. Data 3. Backspace 4. Portrait, Landscape 5. = (Equals to)

QUES-3 SHORTCUT KEYS:-

- | | | |
|--------------------------|---|--------|
| 1. For copying contents | – | Ctrl+C |
| 2. For Bold | – | Ctrl+B |
| 3. For Paste | – | Ctrl+V |
| 4. For Underline | – | Ctrl+U |
| 5. For center alignment | – | Ctrl+E |
| 6. For justify alignment | – | Ctrl+J |

- | | | |
|----------------------------------|---|--------|
| 7. For line Spacing | – | Ctrl+1 |
| 8. For Replace | – | Ctrl+H |
| 9. For Printing | – | Ctrl+P |
| 10. For Spelling & Grammar check | – | F7 |

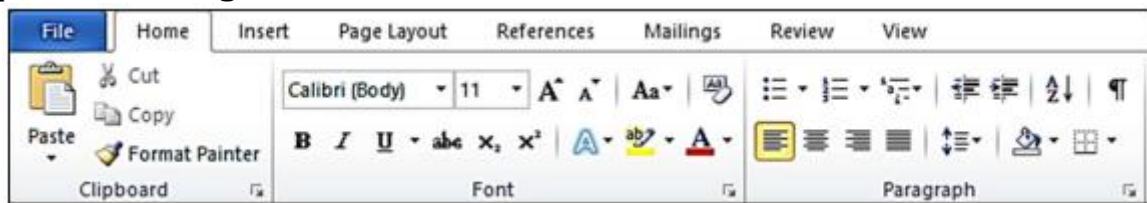
Que:4 Short Answer Type Questions. (Write the answers in 4-5 lines)

Q:1 What is Excel?

Ans: Microsoft Excel is a powerful electronic spread sheet program. Usually, we can use it to automate accounting work, organizing data, and for performing a wide variety of tasks. We can use it to prepare results, doing mathematical calculations and representing data in pictorial form with the help of charts.

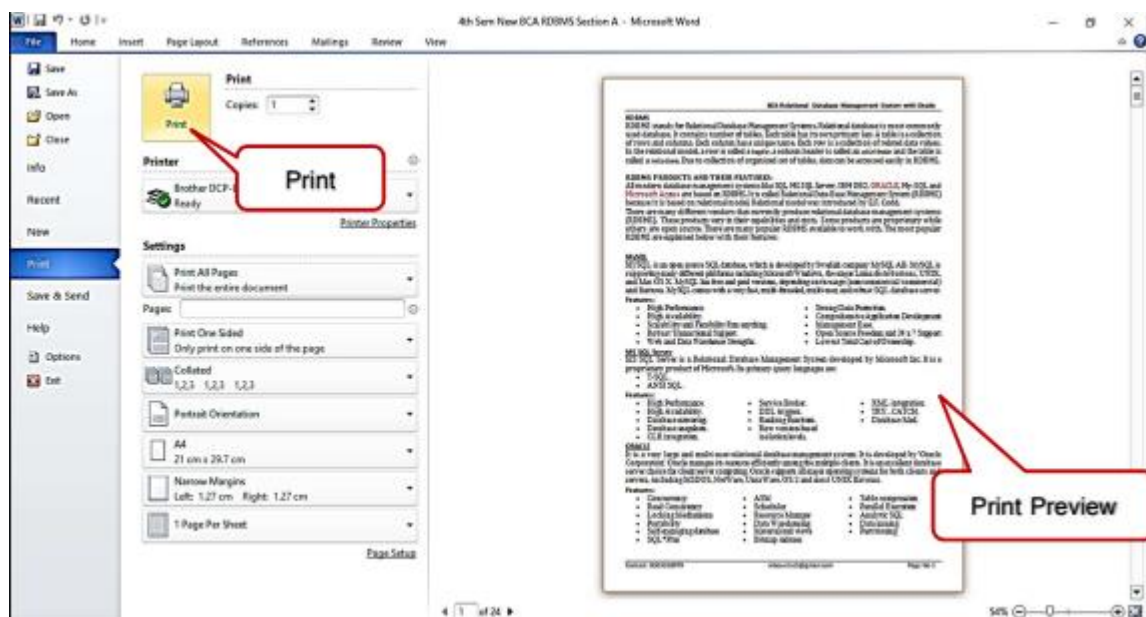
Q:2 Explain formatting in details?

Ans:



Formatting refers to changing the font style, for example: increasing or decreasing the font size, performing bold, italic and underline operation on text. We can change the appearance of text and graphics with the help of formatting options. Text Formatting options are available on the Home tab in MS Word/Excel/PowerPoint.

Q:3



Explain Print & Print Preview options.

Ans: Print preview is a feature that displays on the screen what a hard copy would look like when printed. When we click the Print option in File menu, it automatically will show the preview of our document. It means Print Preview option is used to preview our document on the screen before

getting its hard copy while Print command is used to get the hardcopy of our document by printing it on the paper.

Q:4 What are formulas in MS Excel?

Ans: In MS Excel, Formulas are used to perform different types of calculations. Formulas can be used to perform different types of calculation for preparing results and fee related data. In Excel, a formula always begins with equals to (=) symbol. Usually, we use cell references in formulas along with the operators to perform calculations. Some of the examples of formulas are:

=D15+D18+D21

=(B16+C16)*1.07

Q:5 What do you know about the formula bar in Excel?

Ans: Formula Bar is one of the most important components of MS Excel. The Formula Bar is available at the top of the Excel window, just below the ribbon area. The Formula Bar has two parts: left and right side. Left side is Name Box which shows the name or address of current selection while right side shows the contents of the currently selected cell.

Q:6 What are Margins?

Ans: A margin is the space between the contents and the edge of our document. We can set the margins at all the sides (Top, Bottom, Left, Right) of the page. By default, a new document's margins are set to Normal, which means it has a one- inch space between the contents and each edge. Word allows us to change the margin size in our document as per our requirement.

Que:5 Long Answer Type Questions. (Write the answers in 10-15 lines)

Q:1 What are Word Processors? Explain their uses.

Ans: A word processor is an application software that is used to prepare different types of documents. MS Word and WordPad are the common examples of word processors. Common uses of Word Processors are explained below:

- ☐ To prepare documents, letters etc.
- ☐ To format the documents.

- ☐ To prepare letterheads for personal and business purpose.

- ☐ To design different types of documents such as resumes or invitation cards etc.

Q:2 Describe the Proofing options in MS Word?

Ans: Word can also proof read our document to highlight other possible mistakes. For example: misplaced commas or correctly spelled words that may be used incorrectly etc can be highlighted using Proofing option. To make word proof read our document, Click the Proofing icon at the bottom of the document window. Following are the options that can be used for proofing:

- ☐ **Auto Correct:** This option helps us to replace a misspelled word with the correct one automatically during typing text.



- ☐ **Spelling and Grammer:** MS Word also helps us to find and correct grammer and spelling errors in our document. Word displays a red wavy line under the misspelt word while green wavy line is used to show the gramatical error in the document. A new blue wavy line has also been added

in the new versions of word which represents the formatting inconsistency. For checking and correcting spelling and grammar mistakes, function key F7 can be used.

Q:3 Explain the Page Setup and Printing Options available in Excel.


Ans: Page Setup allows us to change the structure and layout of pages in a document. The “Page Setup” group on the “Page Layout” tab contains buttons that allow us to make changes in the page setup of document. Using these options, we can change the margins, page orientation (portrait or landscape), paper size (A4, Legal, Letter) etc. We can do these operations using the Page Setup dialog box. This dialog box can be opened by clicking on the dialog launcher icon present at the bottom-right corner of Page Setup group. Printing options include Print Preview and Print commands. Print preview is a feature that displays on the screen what a hard copy would look like when printed. When we click on Print option in File menu, it automatically shows the preview of our document. It means Print Preview option is used to preview our document on the screen before getting its hard copy while Print command is used to get the hardcopy of our document by printing it on the paper.


Q:4 What are functions in Excel? Explain any two functions with example.

Ans: A function is a predefined formula that performs calculations using specific values in a particular order. Excel includes many common functions that can be used to quickly perform calculations, for example: SUM, AVERAGE, COUNT, MAX and MIN etc. Following is the explanation of two functions:  **MAX:** This function is used to find the largest numeric value from a range of values. It ignores empty cells, the logical values TRUE and FALSE, and text values. Example: =MAX(A1:C1)  **MIN:** This function is used to find the smallest numeric value from a range of values. It ignores empty cells, the logical values TRUE and FALSE, and text values. Example: =MIN(A1:C1)

Q:5 Explain the various methods of Typing?

Ans: Typing is the process of writing or inputting text by pressing keys on a typewriter, computer keyboard, cell phone, or calculator. Text can be in the form of letters, numbers and other symbols. For typing on computer system, we can use the following techniques:

 **Touch Typing:** Touch typing is a technique by which we can learn typing with all fingers, step by step, without having to look down at the keyboard. It helps us to increase our typing speed. Any typing-tutor software can be used for learning this technique.

 **Voice Typing:** In this type of typing technique, speech recognition programs are used for typing that converts spoken words into text. Voice-to-text technique was originally developed as an assistive technology for the visually impaired or handicapped persons. For typing in Punjabi language, we usually use Lipikar punjabi app in mobiles.

Chapter 2nd

Control Statements

1. Objective Type Multiple Choice Questions:

1. Which of the following statement is also called as conditional statement?
a. for b. break c. **if** d. while
2. switch-case is similar to _____ statement
a. if else b. **if else if** c. break d. goto
3. Which statement can be used to terminate a case in the switch statement?
a. continue b. goto c. if d. **break**
4. Which of the following is an example of Post Test loop?
a. for b. while c. **do while** d. continue
5. Which of the following is not a jumping statement?
a. **while** b. continue c. goto d. break

2. FILLUPS: -

1. In **Pre-Test** loops, the control conditions are tested before the body of loop
2. In **Post-test** loops, the control conditions are tested after the body of loop
3. **Continue** statement is used to skip some statements inside the loop
4. **Switch case** is a multi-way conditional control statement
5. The break statement can be used to terminate a case in the **Switch** statement.

3. TRUE/FALSE:-

1. Writing if statement within another if is called nested loops. **FALSE**
2. Control Statements in C programming are used for altering the normal flow of program. **TRUE**
3. Continue statements is sometimes desirable to skip some statements inside the loop. **TRUE**
4. Looping Statements provide a way to repeat commands. **TRUE**

4. Short Answer Type Questions:

Q:1 Define Branching? Name its different control statements?

Ans: Those control statements which are used for decision making purpose or for making multi-way selection in the program are called Branching Statements. These statements choose to follow one branch or another during execution in the program. Branching statements are of the following two types:

- ☐ Conditional Control Statements (if else)
- ☐ Multiway Conditional Control Statement (switch case)

Q:2 What is looping? Name three different types of looping statements?

Ans: Those control statements which are used to repeat a set of statements in the program are called looping statements. Looping statements are also called Iterative Statements. Following three looping statements are used in the C programming:

- ☐ for loop
- ☐ while loop
- ☐ do while loop

Q:3 What is nested if statement? Write its syntax?

Ans: When one if statement is used within another if statement, it is known as nested if statement.

Syntax of nested if statement if given following:

```
if (test_condition_1)
{
    if (test_condition_2)
```

```

{
    statements;
}
}

```

Q:4 What is if-else statement? Write a program of if-else statement?

Ans: if else statement is a branching statement. It is used for decision making purpose in the C programs. Following program shows the usage of if else statement:

```

#include<stdio.h>
void main()
{
    int marks=45;
    if(marks>=35)
        printf("Pass");
    else
        printf("Fail");
}

```

Q:5 What is while statement? Write its syntax?

Ans: while statement is a looping statement. It is used for repeating set of statements in the program. It is a type of pre-test loop in which test condition is tested before the execution of body of the loop. Following is the syntax of the while statement:

```

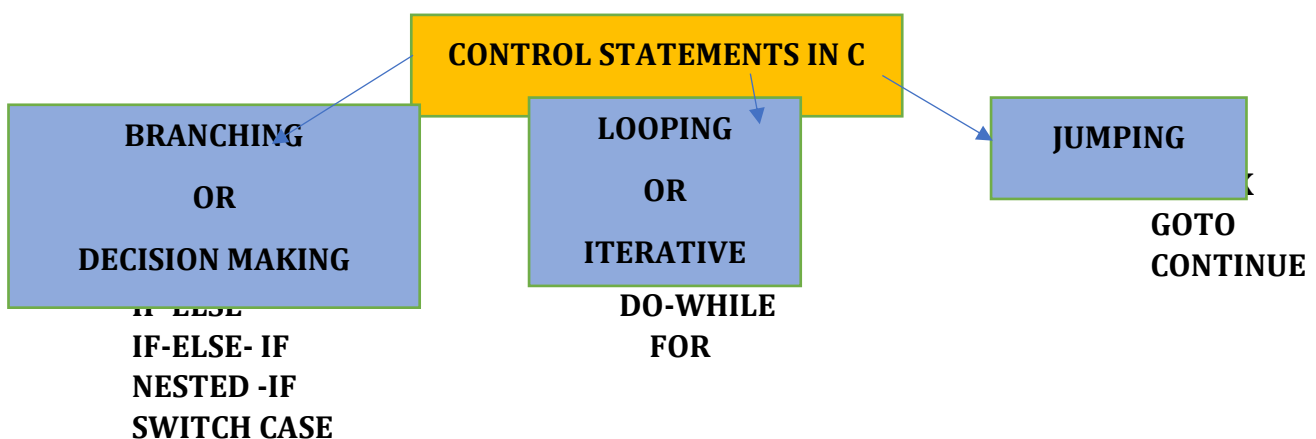
while (test_condition)
{
    statements;
}

```

Long Answer Type Questions:

Q:1 What are Control Statements? Explain their types.

Ans: When a program executes line by line in the given sequence, it is called Sequential Execution of the program. We can control this execution flow in the program as per our requirements. Those statements that control the flow of execution of statements in the program are called Control Statements. These statements can be classified into following three categories:



Q:3 What is for loop? What are the two different categories of loops?

Ans: Looping statements are also called Iterative Statements. Sometimes we face situations that require repeated execution of statements in the program. In such situations, loops help us to repeat statements in the program. Loops can be categorized into following two types:

❑ **Pre-Test Loops:** Pre-Test loops are also called Entry-Controlled loops. In these loops, test condition is tested before the body of the loop. 'for' and 'while' loops are the examples of pre-test loops.

❑ **Post-Test Loops:** Post-Test loops are also called Exit-Controlled loops. In these loops, test condition is tested after the body of the loop. 'do while' loop is an example of post-test loop.

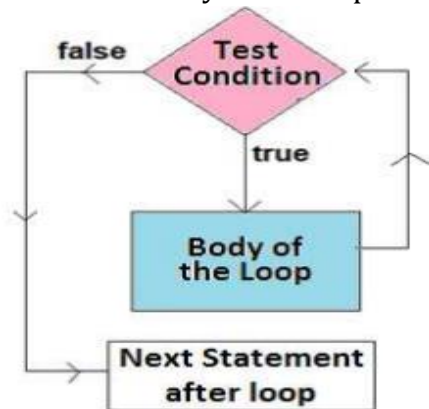


Fig: Pre-Test Loop

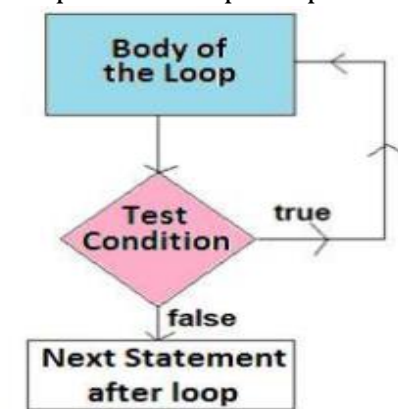


Fig: Post-Test Loop

Q:4 What is jumping statement? Explain its types?

Ans: Jumping statements in the C programming are used to change the normal execution flow of the program. We can transfer the execution flow from one location to some other location in the program. Following jumping statements are used in the C programming:

| Use of goto statement | Use of break statement | Use of continue statement |
|---|--|---|
| <pre> Label1: ← ----- ----- ----- goto Label1; </pre> | <pre> for(___; ___; ___) { ----- break; ----- } </pre> | <pre> for(___; ___; ___) { ----- continue; ----- } </pre> |

❑ **goto statement:** For using these statements, we have to use labels in the program. This statement transfers the execution control at the label specified after the goto statement.

❑ **break statement:** This statement is used to terminate the execution of a loop or switch statement and transfer the execution control immediately after the loop or switch statement.

❑ **continue statement:** Sometimes it is beneficial to skip statements in the loop. continue statement is used in such situations.

Q:5 What is do while loop? How it differs from while loop?

Ans: 'do while' loop is a post-test loop. The 'do while' loop is the only loop which is known as the post-test loop in C programming. In 'do while' loop, test-condition is tested after the execution of body of the loop. In this loop, minimum number of executions for the body of the loop will be one. It is so because whenever this loop is executed for the first time, its body gets executed without executing the test-condition of the loop. 'Do while' loop is different from the 'while' loop. 'while' loop is a pre-test loop in which test condition is tested before the execution of body of loop. The minimum number of executions for the body of the loop will be zero. It is so because whenever this loop is executed, its body cannot be executed without executing the test-condition even once.

| | |
|--|--|
| <pre>do { ----- ----- } while(test_condition);</pre> | <pre>while(test_condition) { ----- ----- }</pre> |
|--|--|

CHAPTER – 3 COMPUTER NETWORKS

1. Objective Type Multiple Choice Questions:

1. A computer _____ is a set of computers that are connected together.
a. **Network** b. System c. Protocol d. Internet
2. A _____ is basically a multiport repeater.
a. **Hub** b. Switch c. Router d. Bridge
3. A _____ is a 2-port device.
a. Hub b. Switch c. Router **d. Bridge**
4. Wi-Fi stands for _____
a. Wireless Field **b. Wireless Fidelity** c. Wire Fire d. Wire Fidelity.
5. A _____ is a combination of a Bridge and a Router.
a. Switch b. Bridge c. Hub **d. Brouter**

2. FILLUPS:-

1. There are total **seven** layers in OSI Model.
- 2. Network** Layer of OSI model manages device addressing.
3. In **guided** media, data is transferring using cables.
4. Bluetooth is an example of **unguided** media.
- 5. Simplex** Communication mode, data communication is unidirectional.

3. FULL FORMS:-

1. UTP – UNSHIELDED TWISTED PAIR
2. FTP – FILE TRANSPORT PROTOCOL
3. SMTP – SIMPLE MAIL TRANSFER PROTOCOL
4. POP – POST OFFICE PROTOCOL
5. HTTP – HYPERTEXT TRANSFER PROTOCOL
6. MAC – MEDIA ACCESS CONTROL

Que:3 Short Answer Type Questions.

Q:1 What is a Network?

Ans: Networks are the base of communication in Information Technology. A Computer Network is a set of two or more computers which are connected with each other using some communication media. This communication media can be either guided or unguided. Computer networks are used to share information, for communication or to perform some other tasks.



Q:2 Write the different types of OSI layers.

Ans: OSI stands for Open System Interconnection. ISO develops a 7 layered model for communication between computer systems in a network. Each layer performs its designated function. These 7 layers are:

1. Application Layer



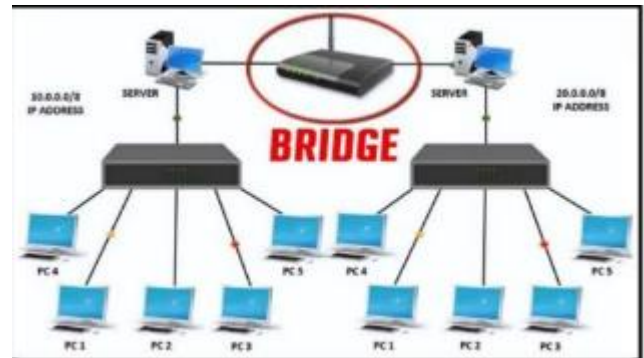
Fig: 7 Layers of OSI Model

2. Presentation Layer
3. Session Layer
4. Transport Layer
5. Network Layer
6. Data Link Layer
7. Physical Layer

Q:3 What is a Bridge?

Ans: Bridge is a network device. This device is used to

connect two different ethernet networks. This device uses MAC addresses to forward data packets in a network. It only forwards packets from one network to another concerned network. This device has only one input port and only one output port. Hence this device is also called 2-port device.



Q:4 Why do we need a network?

Ans: Following are some of the important reasons why we need a network:

- ☐ To Communicate information (using email, video, instant messaging).
- ☐ To share different types of hardware devices (such as printers, modems, etc.).
- ☐ To share files.
- ☐ To share software and operating systems available on remote systems.
- ☐ For network users so that they can easily access and manage information.

Q:5 What is guided media?

Ans: Guided media is a type of transmission media. Using this media, data is transferred using cable wires. This media transfers data through a particular fixed path. Examples of commonly used guided media are:

- ☐ Twisted pair cable
- ☐ Co-axial cable
- ☐ Optical fiber cable

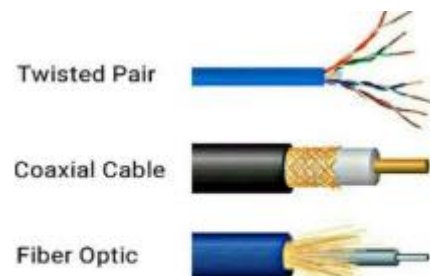


Fig: Guided Media

Q:6 What is un-guided media?

Ans: Unguided media is also a type of transmission media. Using this media, data is transferred through air without using cable wires. This type of communication is often referred to as wireless communication. In this media, data transfer can take place in any direction instead of a fixed path. Examples of commonly used unguided media are:

- ☐ Infrared
- ☐ Bluetooth
- ☐ Wi-Fi
- ☐ Radio waves

☐ Microwaves ☐ Satellites

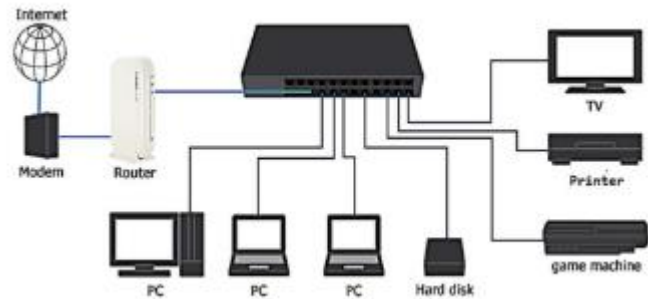
Q:7 Define Protocol.

Ans: Network protocols are a set of rules. These rules control the exchange of information in an easy, reliable and secure way. Any kind of data transfer over the network or the Internet is possible only with the help of these protocols. TCP/IP, FTP, SMTP, HTTP, etc. are examples of some commonly used network protocols.

Que:4 Long Answer Type Questions.

Q:1 What are network devices? Describe any three network devices.

Ans: Network device refers to the hardware devices that are used to build a network. Different types of network devices are used for different types of networks, such as: switches, hubs, routers, bridges, gateways, brouters, etc. Following is the description of some of the major network devices:



☐ **SWITCH:** This device connects the various devices in a network, such as computers, printers, routers, or other switches, so that these devices can communicate with each other.

☐ **ROUTER:** This device is used to connect our network to the Internet. It is a switch-like device that sends data packets to the network based on its IP address.

☐ **BRIDGE:** This device is used to connect two different Ethernet (LANs) networks. It uses the MAC address to forward data packets to the network. This device has only one input port and only one output port. That is why it is also called 2-port device.

Q:2 What is Unguided Media? Explain any two media.

Ans: Unguided media is a type of transmission media. Using this media, data is transferred through air without using cable wires. This type of communication is often referred to as wireless communication. In this media, data transfer can take place in any direction instead of a fixed path. Bluetooth, WiFi, Radio Waves, Satellites etc. are the examples of Unguided Media.

☐ **WiFi:** Full Form of WiFi is Wireless Fidelity. It is a popular wireless networking technology. Using this technology, we can exchange wireless information between two or more devices connected to the same network.

☐ **Bluetooth:** It is a kind of radio communication technology. It enables short-distance wireless networking between phones, computers and other networking devices. The process used to connect two Bluetooth devices is called "pairing".

Q:3 What is a Twisted Pair Cable? Define its advantages and disadvantages.

Ans: Twisted pair cable is a guided transmission media. It is used to transmit data across a network. This cable consists of two different insulated copper wires, which are twisted together. The first wire is used for data transfer and the second wire is used for grounding (earthing). The wires are twisted together to reduce cross-talk.

Advantages of Twisted Pair Cable:

☐ These cables can be used for both analog and digital broadcasting.

- ❑ These cables are cheap for short distances.
- ❑ If any part of the network is damaged, the entire network is not down.

Disadvantages of Twisted Pair Cable:

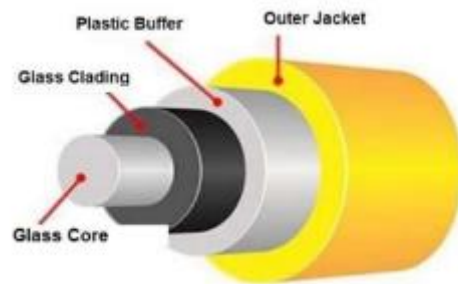
- ❑ The signal cannot travel over the long distances without the use of repeaters.
- ❑ These wires are very thin and break easily.

Q:4 What is Fibre Optic Cable? Define its advantages and disadvantages.

Ans: Optical fiber cable is a guided transmission media. It is used to transmit data across a network.

It transfers digital data signals in the form of light. This cable is made up of many thin flexible optical fibers. Each fiber is made up of three layers:

- ❑ Core: It is made up of high-quality silica glass or plastic.
- ❑ Cladding: It is also made up of high-quality silica glass or plastic.
- ❑ Buffer: It is an outer protective cover made of plastic.



Advantages of optical fiber:

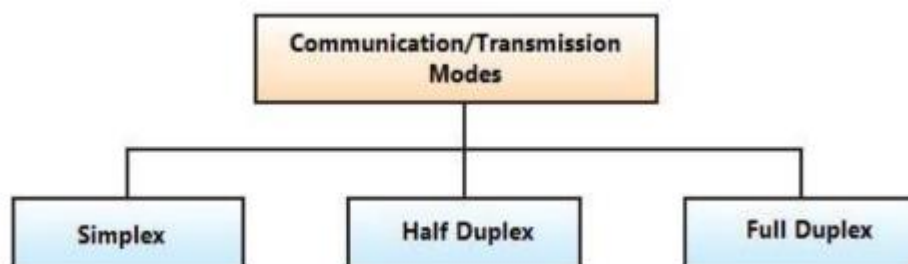
- ❑ It is suitable for industrial and noisy areas.
- ❑ Its data transfer rate is very high.
- ❑ It can be used to transfer data over hundreds of miles.

Disadvantages of optical fiber:

- ❑ Optical fiber cables are expensive.
- ❑ These wires are not easy to use.

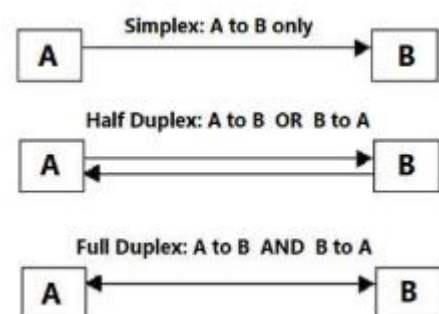
Q:5 What is Communication Mode? Define its types in detail.

Ans: Communication mode is also known as transmission mode. Transmission mode is the process of transferring data or information between two devices connected within a network. There are three types of communication modes:



❑ **Simplex mode:** In this mode of communication, the communication is unidirectional. Only one of the devices in this mode can send a signal and the other can only receive a signal. For example: Communication between keyboard and computer.

❑ **Half-duplex mode:** In this communication mode, the flow of communication can be in both directions, but only one device is capable of communicating at a time. For example: In a walkie-talkie, sender speaks on one side and the receiver on the other side listens and then after a pause, another speaks and the first-person listens.



❓ **Full duplex mode:** Even in full duplex mode, the flow of communication is in both directions, but communication is possible in both directions at the same time. This is the fastest mode of communication between devices. For example: Communication between two people using mobile phones.

Current Trends in Information Technology

Que1: Multiple Choice Questions

1. Information Technology (IT) is an area under which computers or other physical devices (hardware, software) are used to create, _____, secure and exchange electronic data.

- a. Access b. process c. define d. save

2. With the introduction of online education services, students can learn from anywhere using the _____

- a. Internet b. electricity c. 5G Technology d. email

3. Android operating system is a _____ operating system.

- a. Computer b. Mobile c. Technology d. Virtual reality

4. Cloud computing is a kind of _____ based computing.

- a. Big-data b. IoT c. Internet d. Bluetooth

Que:2 Write the Full form of following

1. **Wi-Fi** : Wireless Fidelity
2. **VR** : Virtual reality
3. **IoT** : Internet of Things
4. **IT** : Information Technology
5. **GPS** : Global Positioning System

Que:3 Short Answer Type Questions.

Q:1 What is Information Technology?

Ans: Information technology is a technology in which computers or other devices are used to create, process, store and exchange electronic data. Information technology is such a field of any organization or business that does all the operations related to computers and technology.

Q:2 Give name of any four current trends in Information Technology.

Ans: Following are the names of current major trends in information technology:

- WiFi technology
- Bluetooth technology
- E-commerce
- GPS technology
- Android technology
- Internet of Things (IoT)

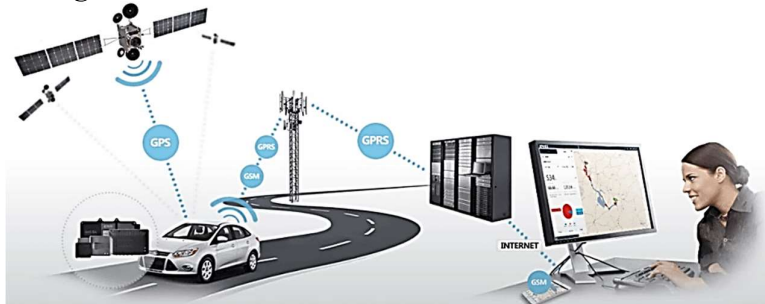
Q:3 Define Bluetooth Technology.

Ans: Bluetooth is a type of radio communication technology that allows all types of media files to be sent or received wirelessly. It enables short-distance wireless networking between phones, computers and other devices. The process used to connect two Bluetooth devices is called "pairing".



Q:4 Define GPS Technology.

Ans: The full name of GPS is Global Positioning System. GPS is available in every smartphone today. GPS is used to find the geographical location of any place. It is a global navigation satellite system. We can use it to find the distance or route between two places. When we send our live location to someone on WhatsApp, we are using GPS.

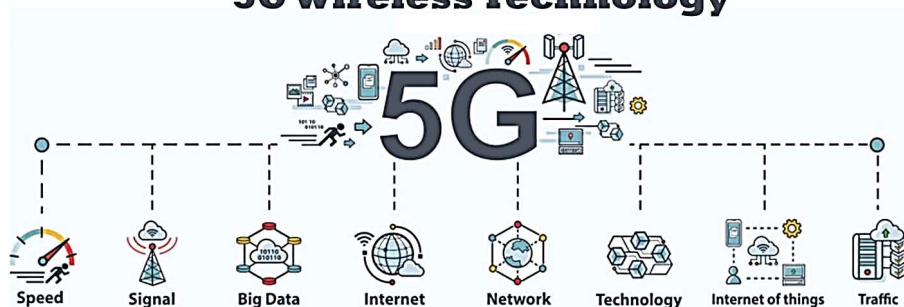


Q:5 Define Multimedia Technology.

Ans: It includes all the techniques that help us to create or display multimedia content. Images, audio, video, text and animation are important elements of any multimedia content. Special types of multimedia management software are used to create multimedia content.

**Q:6 Define 5G technology.**

Ans: 5G technology means 5th generation technology. 5G is the next generation of wireless technology. This technology is much better than 2G, 3G and 4G technologies. The 5G technology based mobile networks will connect people as well as connect and control machines and devices. In 5G technology, the speed of internet can be 100 times faster than 4G technology. Its internet speed will be more than 20 Gbps so that large amount of data can be easily downloaded and uploaded within a very short time span.

5G Wireless Technology**Que:4 Long Answer Type Questions.****Q:1 What is Information Technology? Describe the various applications of Information Technology?**

Ans: Information technology is used in every field of human life. Here is a description of some of the application areas of information technology:

- **Business:** Information technology is used in business to run it smoothly.
- **Classroom education:** This application area uses computers, smart boards etc. as a medium of instruction for teaching purposes.
- **Online education:** In online education, students can get education from anywhere by using internet.
- **Health:** Information technology has greatly improved the field of health. Information technology is used to manage lab test results, patient records, etc.
- **Media:** Information technology has changed the face of media. TV, radio, online websites etc. are being used to reach people.
- **Transportation:** In the field of transportation, information technology is used for various purposes, such as: booking railways and airplane tickets from home, availability of seats, travel time, etc.
- **Telecommunications:** Information technology has opened the door to new telecommunication services, such as: exchanging information via email, video conferencing etc,
- **Entertainment:** The computer has become an important tool for watching movies, listening music and playing games etc.

Q:2 Describe Android Technology with its advantages.

Ans: Android is an operating system. It is used for mobile devices. It was developed by the Open Handset Alliance and later supported by Google. It was later used for touch screen devices, cellphones and tablets.

Benefits of Android:

- It is compatible with different platforms, such as Windows, Linux operating system, etc.
- It supports different media, such as: MP3, MP4 etc.

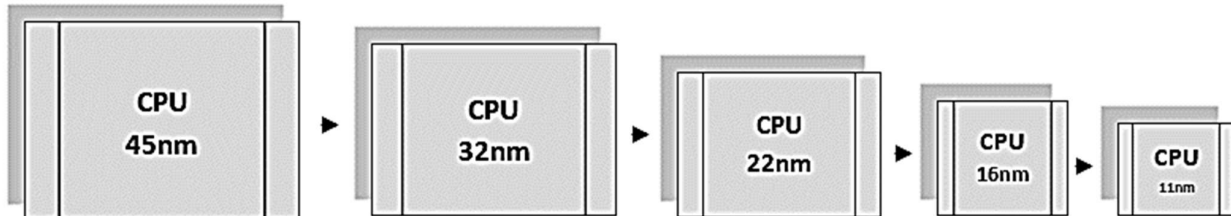


- It supports various technologies, such as: Camera, Bluetooth, Wi-Fi etc.
- It supports multi-tasking.
- It can be used easily.

Q:3 Write short Notes on: Nano Technology and Wi-Fi.

Ans: Nanotechnology and WI-FI technologies are described as follows:

- **Nanotechnology:** Nanotechnology is the engineering in which electronic components are manufactured to the size of nanometers. These electronic components are very small in size and structure. Nanotechnology is used in every field, such as computer science, physics and engineering. The processor in the smartphone is also possible due to the nanotechnology which is small in size but works like a big computer.



- **WI-FI:** Its full name is Wireless Fidelity. It is a popular wireless networking technology. This technology uses radio waves for wireless high-speed internet and network connections. With WIFI we can exchange wireless information between two or more devices connected to the same network.

Q:4 Describe Virtual Reality with its advantages.

Ans: Virtual reality means letting us experience things through computers that don't really exist. It is a computer technology used to create an imaginary world. When we watch a 3D movie, we feel as if everything is actually happening in front of us. It's all our imagination and it doesn't really happen.



Some benefits of virtual reality:

- Virtual reality has made viewing technology more fun.
- Doctors take advantage of virtual reality to diagnose new medical symptoms.
- It creates an imaginary world that matches the reality.
- Virtual reality makes learning easier.
- The use of virtual reality provides a better user experience.

Q:5 Describe Internet of Things (IoT) with its advantages

Ans: The Internet of Things or (IoT) is a new technology that focuses on making human life more comfortable. The Internet of Things (IoT) is a cyber physical system that uses sensors to collect data from the physical world. It is a network of interconnected digital devices and objects. The Internet of Things (IoT) aims to connect everyday devices, such as ACs, refrigerators, TVs etc. to the Internet.

Some of the benefits of the Internet of Things (IoT):

- IoT devices work automatically so it makes human work easier.
- All devices are more secure as they are automatic and technical.
- They definitely save a lot of human time due to high mechanical processing.
- We and our home appliances - cameras etc. stay connected to each other through this technology.
- Our home appliances can be turned on and off automatically, which helps in efficient use of electricity and energy.