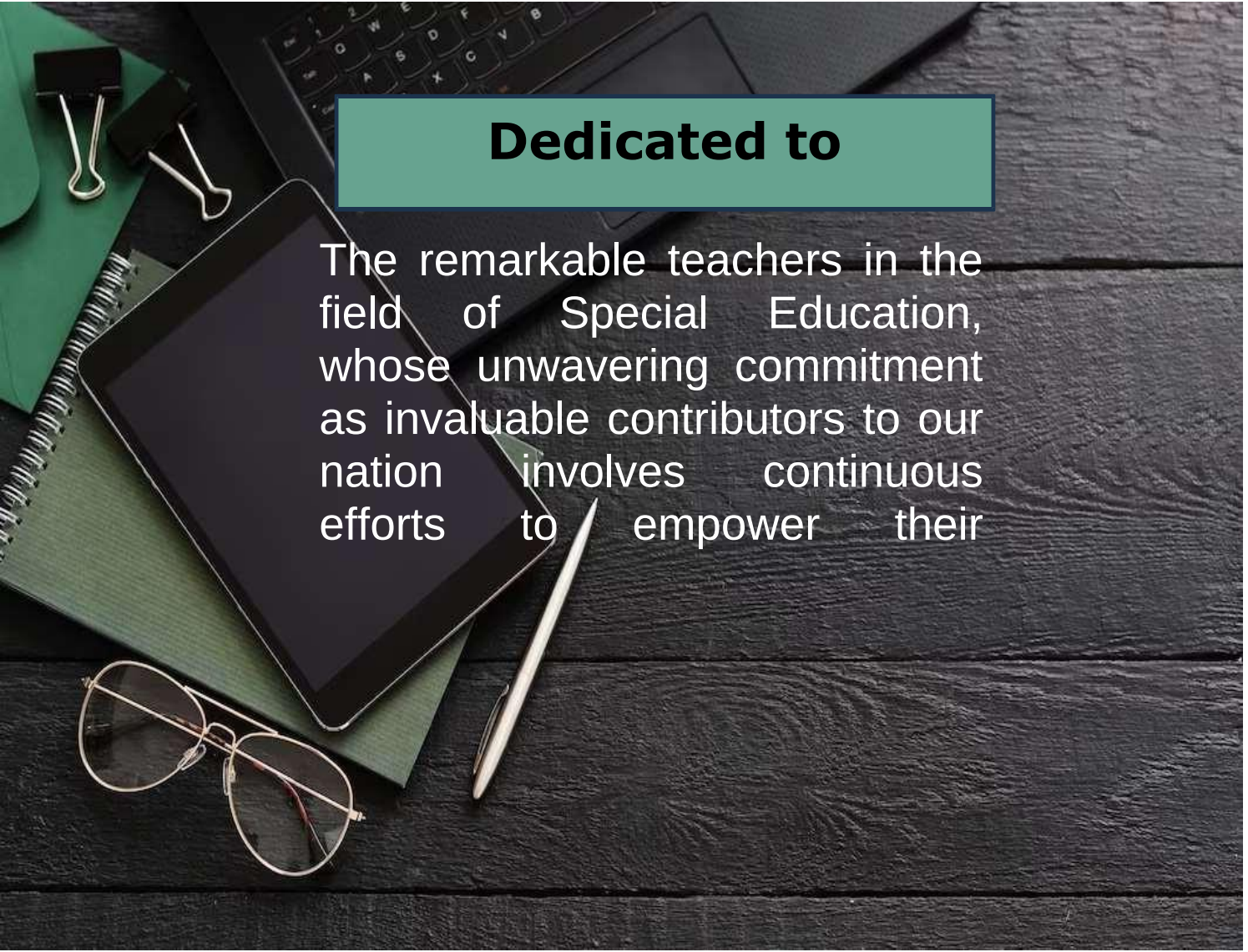




**TEACHING AIDS MODULE FOR TEACHERS OF
HEARING IMPAIRED FIELD
MATRIC VOCATIONAL
(COMPUTER GROUP)**



**GOVERNMENT OF PUNJAB
DIRECTORATE GENERAL OF SPECIAL EDUCATION**



Dedicated to

The remarkable teachers in the field of Special Education, whose unwavering commitment as invaluable contributors to our nation involves continuous efforts to empower their

PREFACE



In response to a directive from the Directorate General of Special Education (DGSE), a dedicated committee was established with the singular objective of enhancing the educational experience of hearing-impaired students enrolled in the matric vocational program, specifically the Computer Group. This ambitious initiative sought to craft an innovative teaching aid module aligned precisely with the curriculum approved by the Technical Education and Vocational Training Authority (TEVTA).

The committee's primary goals, as outlined in its Terms of Reference (TORs), were meticulously defined as follows:

Development of Teaching Aids Module: The committee's foremost responsibility was the creation of teaching aids seamlessly integrated with the prescribed curriculum. The intent was to empower teachers to impart a crystal-clear understanding of concepts and subjects among their students.

Enhancement of Engagement and Interactivity: The committee was entrusted with the task of developing a diverse array of educational resources, encompassing sample videos, functional models, dynamic presentations, and interactive worksheets. These resources were meticulously designed to heighten engagement and foster interactivity during classroom sessions.

Simplification of Lesson Plans: A pivotal focus for the committee was the simplification of intricate lesson plans, rendering them more accessible and comprehensible for instructors / teachers. This dedicated effort aimed to equip teachers / instructors with the tools they needed to deliver content with unparalleled effectiveness.

Measurement of Impact: In order to gauge the effectiveness of the teaching aids developed, the committee assumed the responsibility of formulating a comprehensive set of indicators and checklists. These tools were intended to facilitate the measurement of the teaching aids' profound impact on students' learning outcomes.

Under the astute guidance of the Deputy Director (Curriculum) at the Directorate



General of Special Education, Punjab, the committee convened for a series of significant meetings. The convener provided unwavering guidance and robust support, which played an instrumental role in the success of these gatherings. The active participation of each committee member, drawing upon their distinctive expertise, further enriched the outcomes of these sessions.

To foster efficient communication and seamless collaboration, the convener established a WhatsApp group. This digital platform proved to be invaluable for task distribution and coordination among committee members. The culmination of these collective efforts resulted in the creation of a meticulously designed module. This module stands as a testament to the committee's unswerving dedication to the professional development of computer instructors / Teachers, providing them with a comprehensive resource to effectively deliver the matric vocational (Computer Group) syllabus to hearing-impaired students.



Introduction

The Government of Punjab, in collaboration with the Technical Education and Vocational Training Authority (T.E.V.T.A.), launched a Matric (Vocational) program for Hearing-Impaired students within Special Education institutions in Punjab. This program is affiliated with the Punjab Board of Technical Education (P.B.T.E.), equivalent to SSC (Arts Group).

In today's world, technological advancements have transformed our daily lives. The rapid growth of computing technology plays a pivotal role in our current existence. Information Technology permeates every aspect of life, making it essential for individuals to acquire computer skills, not only for personal development but also for professional success.

The primary objective of this program is to provide comprehensive conceptual and practical training in computer skills, introducing a new dimension to matric education. Computer Education assumes paramount significance for Hearing-Impaired Students as it paves the way for inclusive learning and future opportunities. It enables them to acquire digital literacy, access educational resources through visual mediums, and communicate using text-based methods or visual aids.

Computer education equips these students with the necessary tools to enhance their communication, creativity, and problem-solving skills, empowering them to actively participate in the digital world and pursue various career paths dependent on technology.

Moreover, this program offers the potential for academic and professional growth for Hearing-Impaired individuals. It has been thoughtfully designed to align with modern trends, emphasizing practical skills development, and aims to produce a skilled workforce that aligns with the prevailing market demand, fostering self-employment and active participation in society.

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Course of Study Matric Vocational (Computer Group) Question Bank



1.1. Computer Applications-I

Question Bank:

(**Note:** Due to the unique communication needs of hearing-impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

Multiple Choice Questions

1. Computer processes_____.
 - a) Data
 - b) Information
 - c) Both of them
 - d) None
2. After processing the data computer produces useful_____.
 - a) Data
 - b) Information
 - c) Both of them
 - d) None
3. This is a part of computer system.
 - a) Monitor
 - b) CPU
 - c) RAM
 - d) All of these
4. This is NOT a part of computer system.
 - a) CPU
 - b) Rom
 - c) Computer Table
 - d) Hard disk
5. The technology was used in first generation of computers.
 - a) Vacuum Tube
 - b) Transistors
 - c) ICs
 - d) CPU
6. The technology used in second generation Computers.
 - a) Vacuum Tube
 - b) Transistors

- c) ICs
 - d) CPU
7. The technology was used in third generation Computers.
- a) Vacuum Tube
 - b) Transistors
 - c) ICs
 - d) CPU
8. The technology was used in fourth generation Computers.
- a) Vacuum Tube
 - b) Transistors
 - c) ICs
 - d) CPU
9. The technology was used in fifth generation Computers.
- a) CPU
 - b) Transistors
 - c) ICs
 - d) Artificial Intelligence
10. How many computer generations are there?
- a) 2
 - b) 3
 - c) 4
 - d) 5
11. Computer is an_____device.
- a) Electronic
 - b) Electric
 - c) Mechanical
 - d) Magnetic
12. This is a Hardware.
- a) CPU
 - b) MS windows
 - c) Computer Games
 - d) MSOffice
13. This is an example of hardware.
- a) computer game

- b) MS windows
 - c) Monitor
 - d) MSOffice
14. It is hardware.
- a) Computer game
 - b) MS windows
 - c) MS Office
 - d) Keyboard
15. _____ is used to operate computer system.
- a) Hardware
 - b) software
 - c) both of them
 - d) none
16. This is software.
- a) CPU
 - b) MS Windows
 - c) Monitor
 - d) Keyboard
17. _____ is an example of software.
- a) MS Office
 - b) CPU
 - c) Monitor
 - d) Keyboard
18. It is software.
- a) Computer games
 - b) CPU
 - c) Monitor
 - d) Keyboard
19. This is a feature of windows that allows user to view and change system settings.
- (a) Task bar
 - (b) Control Panel
 - (c) Icon
 - (d) Folder

20. It is a folder that contains deleted objects.

- (a) Desktop
- (b) Laptop
- (c) Recycle bin
- (d) Control Panel

SHORT QUESTIONS

1. What is computer?
2. Identify common parts of computer.
3. Name any two common parts of computer system.
4. Name the technology used in first generation computers.
5. Name the technology used in second generation computers.
6. Name the technology used in third generation computers.
7. Name the technology used in fourth generation computers.
8. Name the technology used in 5th generation computers.
9. What is computer hardware?
10. What is computer software?
11. Name any two major classifications of computer.
12. What is desktop?
13. What is recycle bin?
14. What is the purpose of taskbar?
15. What is control panel?
16. Describe purpose of Add/Remove program feature of control panel.
17. Describe 'Add hardware' feature of control panel.
18. Describe 'Add printer' feature of control panel.

LONG QUESTIONS

1. Identify common parts of computer?
2. Write a note on technologies used in different generation of computer?
3. Describe uses of computer system in different fields (at least 5 uses)?
4. Differentiate between computer hardware and software
5. Name the major classification of computer.

PRACTICAL QUESTIONS

1. Turn on computer system, identify taskbar and recycle bin and turn off the computer.
2. Turn on computer, use start menu to open MS WORD and then close the MSWINDOWS.
3. Open typing software TIPP 10 and type the following text:

Hello! How are you? Are you learning from the past experiences of life? The person can make himself better after looking at his previous life. Experience is the most precious thing in life that can make a person more skillful and technical.

4. Open typing software TIPP 10 and type the following text in 5 minutes: (Examiner will provide any simple paragraph comprising 60 words.)
5. Open MS Word and type following text and apply the formatting given in paragraph.

MICROSOFT WORD

Word-processor software launched in 1983 by the Microsoft Corporation. Software developers Richard Brodie and Charles Simonyi joined the Microsoft team in 1981, and in 1983 they released multi-Tool Word for computers that ran a version of the UNIX operating system (OS).

(Examiner may replace this paragraph with a paragraph of the same difficulty level)

14. Open MS word and draw the following table

Name	Father's Name	Class	Address
Muhammad Abubakar	Naveed Maqsood	8	123 B-II Wapda Town Gujranwala
Nasir M9ahmood	Qasim Ali	10	634 E-2 Johar Town Lahore
Fatima Ahmad	Ahmad Javaid	9	House No.11, Block-91, Leghari Colony Dera Ghazi Khan

15. Open MS word and insert the picture.

(Examiner will help to download any picture if not available in computer's folders)

16. Open MS word and make a list as given below:

Classroom Rules:

- Clean up after yourself.
- Respect others.
- Listen to the teacher.
- Complete assignments on time.
- Raise your hand to ask a question.

17. Launch MS Power Point, insert a new slide and save it.

18. Launch MS PowerPoint and insert a table in it.

19. Launch MS PowerPoint and insert a picture in it.

(Examiner will help to download any picture if not available in computer's folders)

1.2. Computer Hardware & Network-I

Question Bank:

(Note: Due to the unique communication needs of hearing-impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

MULTIPLE CHOICE QUESTIONS

1. It is an electronic device that can create, store and process information.
 - a) digital device
 - b) modem
 - c) router
 - d) switch
2. It is an electronic device that converts digital data into analog data.
 - a) digital device
 - b) modem
 - c) router
 - d) switch
3. It is a networking device that transmits data packets between computer networks.
 - a) digital device
 - b) modem
 - c) router
 - d) switch
4. This device is used to connect multiple PCs to single network.
 - a) hub
 - b) switch
 - c) both a & b
 - d) none
5. This device connects various devices to a single computer network.
 - a) hub
 - b) switch
 - c) both a & b
 - d) none
6. This network device uses electric signals.
 - a) hub
 - b) switch
 - c) both a & b
 - d) none

7. This networking device uses frame and packets.
- a) hub
 - b) switch
 - c) both a & b
 - d) none
8. This device is used to connect a computer to a network.
- a) graphics card
 - b) hub
 - c) switch
 - d) network card
9. This device controls output display screen.
- a) graphics card
 - b) hub
 - c) switch
 - d) network card
10. It is a computer case that contains most parts of the computer including motherboard.
- a) system unit
 - b) CPU
 - c) both a & b
 - d) none
11. It is the brain of the computer that process data.
- a) system unit
 - b) CPU
 - c) both a & b
 - d) none
12. It is a circuit board that allows communication between electronic components of the computer.
- a) network card
 - b) graphics card
 - c) motherboard
 - d) power supply
13. It is permanent type of memory.
- a) RAM
 - b) ROM

- c) both a & b
 - d) none
14. It is temporary type of memory.
- a) RAM
 - b) ROM
 - c) both a & b
 - d) none
15. It is fixed disk in computer that contains data.
- a) hard disk
 - b) power supply
 - c) RAM
 - d) CPU
16. This device converts digital voltage AC to low voltage DC for computer.
- a) hard disk
 - b) power supply
 - c) RAM
 - d) CPU
17. Ports are of _____ types.
- a) 2
 - b) 3
 - c) 4
 - d) 5
18. It transmits one bit of data at a time.
- a) serial port
 - b) parallel port
 - c) USB
 - d) all
19. It transmits more than one bit of data at a time.
- a) serial port
 - b) Parallel port
 - c) USB
 - d) all
20. USB is a type of _____ . .
- a) hub
 - (b) Switch
 - (c) Port
 - (d) Network card

SHORT QUESTIONS

1. What are digital devices?
2. What is modem?
3. What is router?
4. What is HUB?
5. What is switch?
6. What is network card?
7. What is the use of graphics card?
8. What is CPU?
9. What are the functions of system unit?
10. What is motherboard?
11. What is RAM?
12. What is ROM?
13. What is hard disk drive?
14. What is the function of power supply?
15. What is port?
16. What is serial port?
17. What is parallel port

LONG QUESTIONS

1. What is the difference between hub & Switch?
2. What is difference between RAM & ROM?
3. Differentiate between serial and parallel port
4. What is port? Name its types?
5. Differentiate between serial and parallel port?

PRACTICAL QUESTIONS

1. Assemble and disassemble hard disk
2. Assemble and disassemble RAM
3. Assemble and disassemble Power Supply
4. Assemble and disassemble Processor
5. Assemble and disassemble DVD ROM
6. Install MS WINDOWS on computer
7. Install MS OFFICE on computer

1.3. Computer Programming-I

Question Bank:

(**Note:** Due to the unique communication needs of hearing impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

Multiple Choice Questions

1. ____ is the study of what computers can do using computer hardware and software.
 - a) Computer science
 - b) computer thinking
 - c) Computer programming
 - d) None
2. ____ is thinking tool that computer scientists use
 - a) Computer science
 - b) Computer thinking
 - c) Computer programming
 - d) None
3. ____ is making computer do things using computer languages.
 - a) computer science
 - b) Computer thinking
 - c) Computer programming
 - d) None
4. ____ is writing lines of any programming language to make a computer program.
 - a) Coding
 - b) Syntax
 - c) Computer science
 - d) Thinking
5. It is unreal language used by computer programmer to communicate with computer.
 - a) Coding
 - b) Programming language
 - c) Computer program
 - d) Human language
6. The grammatical rules of a programming language are called
 - a) Coding
 - b) Syntax
 - c) Computer science
 - d) Thinking
7. ____ is a set of instructions written in any language.
 - a) Coding
 - b) Syntax

- c) Computer science
- d) Thinking

8. This is NOT a programming language.

- a) JAVA
- b) C++
- c) Python
- d) Install

9. The person who plans and supervises computer software is called.

- a) Coder
- b) Programmer
- c) Both of these
- d) None

10. It is a process of defining and decomposing a problem

- a) Problem analysis
- b) Documentation
- c) Testing
- d) Debugging

11. Any written test or set of pictures or videos that describe a software is called.

- a) Problem analysis
- b) Documentation
- c) Testing
- d) Debugging

12. The data used to test an algorithm or a flow chart is called.

- a) Test data
- b) Testing
- c) Algorithm
- d) Flow chart

13. Testing an algorithm or flow chart with the help of test data is called.

- a) Test data
- b) Testing
- c) Algorithm
- d) Debugging

14. Testing a computer program using test data is called.

- a) Debugging
- b) Testing

c) Algorithm

d) Flow chart

15. Step-by-step process to perform a task is called.

a) algorithm

b) Flow chart

c) Both of these

d) None

16. Pictorial representation of algorithm is called.

a) algorithm

b) Flow chart

c) Both of these

d) None

17. Programming languages of types.

a) 2

b) 3

c) 4

d) 5

18. It is an example of programming language.

a) Python

b) C++

c) Java

d) All of these

SHORT QUESTIONS

1. What is computer science?
2. What is computer thinking?
3. What is computer programming?
4. What is coding?
5. What is programming language?
6. What is syntax?

7. What is computer program?
8. Name some popular programming languages?
9. Who is computer programmer?
10. What is problem analysis?
11. What is documentation?
12. What is testing?
13. What is debugging?
14. What is the difference between testing and debugging?
15. What is flow chart?
16. Define algorithm
17. What is test data?
18. What is Microsoft Visio?

LONG QUESTIONS

1. What is computer programming? List the steps of program development life cycle.
2. What is flow chart? Draw terminal and processing symbols.
3. What is flow chart? Draw processing and decision-making symbols.
4. What is flow chart? Draw flow line symbol and input symbol?
5. What is algorithm? Write keyword for  and  symbols.
6. What is algorithm? Write keyword for  and  symbols.
7. What is algorithm? Write keyword for  and  symbols.

PRACTICAL QUESTIONS

1. Open Microsoft Visio to create a new file and draw terminal symbol and save that file.
2. Open Microsoft Visio to create a new file and draw processing symbol and save that file.

3. Open Microsoft Visio to create a new file and draw decision making symbol and save that file.
4. Open Microsoft Visio to create a new file and draw Input/output symbol and save that file.
5. Open Microsoft Visio, draw input symbol with processing symbol and connect them with the help of flow line.
6. Open Microsoft Visio, draw processing symbol with decision making symbol and connect them with the help of flow line.
7. Open Microsoft Visio, draw decision making symbol and connect it with terminal symbol with the help of flow line.

1.4 Computer Applications-II

Question Bank:

(**Note:** Due to the unique communication needs of hearing impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

Multiple Choice Questions

1. It is a physical network of computers, all over the world
 - a) www
 - b) Internet
 - c) LAN
 - d) All of these
2. Owner of internet is:
 - a) Pakistan
 - b) India
 - c) America
 - d) None
3. It is network of web sites:
 - a) www
 - b) internet
 - c) LAN
 - d) WAN
4. Internet and world wide web (www) are:
 - a) Same
 - b) Different
 - c) Both a & b
 - d) None of these
5. Which is true?
 - a) www is part of internet
 - b) internet is part of www
 - c) Both a and b
 - d) None of these
6. The company that provides, internet service to users is called:
 - a) Internet
 - b) World Wide Web
 - c) Internet Service Provider (ISP)
 - d) All of these
7. The program used to view websites on internet is called:
 - a) Browser
 - b) Viewer
 - c) Word
 - d) Excel

8. This is a web browser
 - a) Internet explorer
 - b) Google Chrome
 - c) Mozilla Firefox
 - d) All of these
9. E-mail stands for:
 - a) Electric mail
 - b) Electronic mail
 - c) Electrifying mail
 - d) Both a & b
10. Sending e-mail is similar to:
 - a) Taking Picture
 - b) Telling story
 - c) Drawing a Map
 - d) Writing a letter
11. Which of the following is used by internet mail?
 - a) HTTP
 - b) TCP/IP
 - c) FTP
 - d) SMTP
12. It is a program that is designed to search for any documents or information on the World Wide Web or the Internet
 - a) Search engine
 - b) www
 - c) Internet
 - d) None of these
13. Search engine uses to search documents
 - a) Ideas
 - b) Key words
 - c) Command
 - d) All of these
14. It is a search engine
 - a) Google
 - b) Yahoo
 - c) Bing
 - d) All of these

SHORT QUESTIONS

1. What is internet?
2. Write down any two uses of internet?
3. What is the purpose of ISP?
4. What does ISP stand for?

5. What is World Wide Web?
6. What does WWW stand for?
7. Name any two web browsers
8. Define search engine
9. What is email?
10. Write down advantages of email (any two)

LONG QUESTIONS

1. What is web browser and how does it work?
2. What are the advantages of internet?
3. What are the disadvantages of internet?
4. How is email different from ordinary mail.

PRACTICAL QUESTIONS

1. Make an email account on Hotmail, Gmail or Yahoo.
2. Create and send email to your friend.
3. Create a new folder and save it on desktop.
4. Open your email box and download any attached file
5. Open your email and forward any email to another friend
6. Create a new email, attach any file with it and send it to a friend
7. Open Windows and create a folder on desktop
8. Open Windows and copy a file from any drive and paste it on a folder on desktop
9. Open Windows and create a folder and rename it.
10. Open Windows and rename any Word file
11. Open Windows, delete a file and folder from desktop and restore it from recycle bin
12. Open In-page software and type a paragraph of 5 lines
13. Open MS excel and create a table comprising 5 columns and 5 rows. Put formula of addition or use SUM function in the last cell of every column so that values in previous cells of every column are added. For example:

10	20	30	40	50
20	30	40	50	60
30	40	50	60	70
40	50	60	70	80
100	140	180	220	260

1.5 Computer Hardware & Network-II

Question Bank:

(**Note:** Due to the unique communication needs of hearing impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

Multiple Choice Questions

1. Group of two or more than two computers, linked together is called:
 - a. Network
 - b. Link
 - c. World Wide Web
 - d. All of these
2. How many main types of computer networks are there?
 - a. 2
 - b. 3
 - c. 4
 - d. 5
3. It is a type of computer network:
 - a. LAN
 - b. MAN
 - c. WAN
 - d. All of these
4. Two or more computers sharing resources in the same building, are called:
 - a. LAN
 - b. WAN
 - c. Both a and b
 - d. None of these
5. Groups of computer connected together, linked with one another through telephone line etc. in different buildings, cities etc. are called:
 - a. LAN
 - b. WAN
 - c. Both a and b
 - d. None of these

6. It connects multiple LANs across a large area but is smaller than a WAN
 - a. LAN
 - b. MAN
 - c. Both a and b
 - d. None of these
7. In a computer network, it is a computer that serves other computers
 - a. Server
 - b. Client
 - c. Both of these
 - d. None of these
8. In a computer network, this computer is served by another computer:
 - a. Server
 - b. Client
 - c. Both of these
 - d. None of these
9. It is an input device
 - a. Monitor
 - b. Keyboard
 - c. Printer
 - d. All of these
10. It is an output device
 - a. Monitor
 - b. Keyboard
 - c. Mouse
 - d. None of these
11. It is a peripheral device
 - a. Keyboard
 - b. Mouse
 - c. Monitor
 - d. All of these
12. It is an input device
 - a. Monitor
 - b. Printer
 - c. Both a and b
 - d. None of these

13. It is an output device
- a. Keyboard
 - b. Mouse
 - c. Touchpad
 - d. None of these

SHORT QUESTIONS

1. What is network?
2. How many main types of networks available? Name them
3. What is LAN?
4. What is MAN?
5. What is WAN?
6. What does LAN stand for?
7. What does MAN stand for?
8. What does WAN stand for?
9. What is server?
10. What is client?
11. What are input devices?
12. What are output devices?

LONG QUESTIONS

1. What is difference between LAN and WAN? Give examples of both
2. What is difference between input and output devices?
3. How is MAN different from WAN and LAN?
4. Write a note on peripheral devices.

PRACTICAL QUESTIONS

1. Identify input and output peripheral devices attached with computer
2. Attach/Detach an LCD/LED with system unit
3. Attach/Detach a printer with system unit
4. Install "Avast Antivirus" utility software on a computer.
5. Install "WINRAR" utility software on a computer.

1.6 Computer Programming-II

Question Bank:

(**Note:** Due to the unique communication needs of hearing impaired children, their course cannot be segregated into **Simple**, **Moderate**, and **Hard** levels of learning difficulty)

Multiple Choice Questions

- 1) source code editor is:
 - a) editor
 - b) text editor
 - c) programming editor
 - d) none of these
- 2) This editor is available on MS Windows
 - a) WordPad
 - b) Notepad
 - c) Both of these
 - d) None of these
- 3) How many major versions of python are there?
 - a) 2
 - b) 3
 - c) 4
 - d) 5
- 4) This is a version of Python
 - a) Python 1
 - b) Python 2
 - c) Python 3
 - d) Both b and c
- 5) Python is programming language
 - a) Text-based
 - b) Picture based
 - c) Both a and b
 - d) None of these
- 6) When we install Python, this editor is installed by default
 - a) Sublime Text 3

- b) IDLE
 - c) Atom
 - d) All of these
- 7) It does not change its value over time
- a) Variable
 - b) Constant
 - c) Both a and b
 - d) None of these
- 8) These are containers for storing data values
- a) Variables
 - b) Constants
 - c) Both a and b
 - d) None of these
- 9) A Python variable must start with:
- a) A letter
 - b) Underscore
 - c) Both a and b
 - d) None of these
- 10) They are used to perform operations on variable and values
- a) Variables
 - b) Constants
 - c) Operators
 - d) Strings
- 11) This symbol is used in Python as addition operator
- a) +
 - b) -
 - c) *
 - d) /
- 12) This symbol is used in Python as subtraction operator
- a) +
 - b) -
 - c) *
 - d) /
- 13) This symbol is used in Python as multiplication operator
- a) +
 - b) -

- c) *
- d) /

14) This symbol is used in Python as division operator

- a) +
- b) *
- c) \
- d) /

SHORT QUESTIONS

1. What is an editor?
2. What is programming editor?
3. What is IDLE?
4. What is string variable?
5. Create a variable named car name and assign the value Volvo to it.
6. Create a variable named x and assign the value 50 to it.
7. What is purpose of input statement in Python?
8. What is purpose of print statement in Python?
9. What is the use of addition operator in python? Explain with an example
10. What is the use of subtraction operator in python? Explain with an example
11. What is the use of multiplication operator in python? Explain with an example
12. How would you divide two numbers in Python? Describe with the help of example

LONG QUESTIONS

1. Write a note on Python language
2. Write down uses of Python language (any 4)
3. Write down rules for Python variables
4. Name the commonly used built-in data types of Python

PRACTICAL QUESTIONS

1. Use Python Editor to PRINT your name on screen
2. Create a program using Python. Save your age in variable1 and save yourname in variable2.
3. Use PRINT statement to print your age and name
4. Use INPUT Statement to get the value of variable from user
5. Write a program to add two numbers using Python Language.
6. Write a program to subtract 2nd number from 1st number using Python.
7. Write a program to multiply 1st number with 2nd number using Python.
8. Write a program to divide 1st number with 2nd number using Python.

Academic Calendar



2. ACADEMIC CALENDAR

Session (2023-24)

Computer Application-I

Sr#	Time Period	Contents to be Covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-4
		SQs #	1-2
		LQs #	1
		Pr. #	1-2
2	October 2023	MCQs #	5-10
		SQs #	3-7
		LQs #	2
		Pr. #	3-4
3	November 2023	MCQs #	11-18
		SQs #	8-10
		LQs #	3
		Pr. #	5-6
4	December 2023	Revision and December Tests	
5	January 2024	MCQs #	19-20
		SQs #	11-13
		LQs #	4
		Pr. #	15-17
6	February 2024	MCQs #	-
		SQs #	14-15
		LQs #	5
		Pr. #	18-20
7	March 2024	MCQs #	-
		SQs #	16-17
		LQs #	-
		Pr. #	-
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

Computer Application-II

Sr#	Time Period	Contents to be Covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-2
		SQs #	1-2
		LQs #	1
		Pr. #	1-2
2	October 2023	MCQs #	3-6
		SQs #	3-4
		LQs #	2
		Pr. #	3-4
3	November 2023	MCQs #	7-8
		SQs #	5-7
		LQs #	3
		Pr. #	5-6
4	December 2023	Revision and December Test	
5	January 2024	MCQs #	9-11
		SQs #	8-9
		LQs #	4
		Pr. #	7-9
6	February 2024	MCQs #	12-13
		SQs #	10
		LQs #	-
		Pr. #	10-11
7	March 2024	MCQs #	14
		SQs #	-
		LQs #	-
		Pr. #	12-13
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

Computer Hardware & Networks - I

Sr#	Time Period	Contents to be covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-3
		SQs #	1-3
		LQs #	-
		Pr. #	1
2	October 2023	MCQs #	4-7
		SQs #	4-5
		LQs #	1
		Pr. #	2-3
3	November 2023	MCQs #	8-10
		SQs #	6-7
		LQs #	2
		Pr. #	4-5
4	December 2023	Revision and December Test	
5	January 2024	MCQs #	11-14
		SQs #	8-12
		LQs #	-
		Pr. #	6-7
6	February 2024	MCQs #	15-16
		SQs #	13-14
		LQs #	3
		Pr. #	-
7	March 2024	MCQs #	17-20
		SQs #	15-17
		LQs #	4
		Pr. #	-
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

Computer Hardware & Networks-II

Sr#	Time Period	Contents to be Covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-2
		SQs #	1-2
		LQs #	1
		Pr. #	1
2	October 2023	MCQs #	3-5
		SQs #	3-5
		LQs #	2
		Pr. #	2
3	November 2023	MCQs #	6-8
		SQs #	6-8
		LQs #	3
		Pr. #	3
4	December 2023	Revision and December Test	
5	January 2024	MCQs #	9-10
		SQs #	9-10
		LQs #	4
		Pr. #	4
6	February 2024	MCQs #	11-13
		SQs #	11-12
		LQs #	-
		Pr. #	5
7	March 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

Computer Programming -I

Sr#	Time Period	Contents to be covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-2
		SQs #	1-2
		LQs #	1
		Pr. #	1
2	October 2023	MCQs #	3-6
		SQs #	3-6
		LQs #	2
		Pr. #	2
3	November 2023	MCQs #	7-9
		SQs #	7-9
		LQs #	3
		Pr. #	3
4	December 2023	Revision and December Test	
5	January 2024	MCQs #	10-11
		SQs #	10-11
		LQs #	4-5
		Pr. #	4-5
6	February 2024	MCQs #	12-14
		SQs #	12-14
		LQs #	6-7
		Pr. #	6
7	March 2024	MCQs #	15-18
		SQs #	15-18
		LQs #	8
		Pr. #	7
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

Computer Programming -II

Sr#	Time Period	Contents to be Covered	
1	August 21, 2023 - September 30, 2023	MCQs #	1-2
		SQs #	1-3
		LQs #	1
		Pr. #	1-2
2	October 2023	MCQs #	3-5
		SQs #	4-6
		LQs #	2
		Pr. #	3-4
3	November 2023	MCQs #	6-7
		SQs #	7-8
		LQs #	3
		Pr. #	5-6
4	December 2023	Revision and December Test	
5	January 2024	MCQs #	8-9
		SQs #	-
		LQs #	4
		Pr. #	7-8
6	February 2024	MCQs #	10-12
		SQs #	9-10
		LQs #	-
		Pr. #	9
7	March 2024	MCQs #	13-14
		SQs #	11-12
		LQs #	-
		Pr. #	10
8	April 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision
9	May 2024	MCQs #	Revision
		SQs #	Revision
		LQs #	Revision
		Pr. #	Revision

LESSON PLANS



3. Lesson Plans

3.1. Computer Applications-I & II

Sr. No	Lesson No	Topic/Question Item
1	CA/I/1	What is Computer?
2	CA /I/2	Identify common parts of computer?
3	CA /I/3	Generation of computers (1 st to 5 th)
4	CA /I/4	Describe Uses of Computer system in different Fields.
5	CA /I/5	Difference between Computer Hardware and Software.
6	CA /I/6	Name the major classification of computer.
7	CA /I/7	Turn on computer system, identify taskbar and recycle bin and turn off the computer.
8	CA /I/8	Using start menu open MS WORD and then close the MS Word.
9	CA /I/9	Turn on computer system, identify taskbar and recycle bin and turn off the computer.
10	CA /I/10	Open MS Word and type following text and apply the formatting given in paragraph.
11	CA /I/11	Open MS word and draw the table.
12	CA /I/12	Open MS word and insert the picture and make a list as given below:
13	CA /I/13	Launch MS Power Point, insert a new slide &save.
14	CA /I/14	Launch MS Power Point, insert a table and insert a picture.
15	CA/II/1	What is internet?
16	CA /II/2	What is Web Browser and How Does it Work?
17	CA /II/3	What are Advantages/uses of Internet?
18	CA /II/4	What are disadvantages of Internet?
19	CA /II/5	What is world wide web (WWW)?
20	CA /II/6	What is ISP and its purpose?
21	CA /II/7	What is Search Engine?
22	CA /II/8	Email Management
23	CA /II/9	File and folder Management
24	CA /II/10	Introduction to Inpage
25	CA /II/11	Introduction to MS Excel

LESSON PLAN

Lesson Plan No.	CA/I/1
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Mona Ajaz
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	What is Computer?
Objective	By the end of this lesson students will be able to ● Describe the computer ● Understand its working
Materials	Recognize the sign language of different parts of computers. ● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following definition of computer on White board. “Computer is an electronic device that takes input, processes data into useful information and stores it for later use. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● Computer ● Electronic ● Device ● Input ● Process ● Useful ● Information ● Store While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the definition of computers so that they could reproduce.

LESSON PLAN

Lesson Plan No.	CA/I/2
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Mona Ajaz
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	Identify common parts of computer?
Objective	By the end of this lesson students will be able to ● Identify common parts of computer ● Understand its purpose and benefits Recognize the sign language of different parts of computers.
Materials	● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following parts of computer on White board. There are five basic parts of computer. 1. Input Devices 2. Output Devices 3. Storage Devices 4. Processing Unit (CU, ALU) Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● Input Devices ● Output Devices ● Storage Devices ● Processing Unit (CU, ALU) While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the common parts of computers so that they could reproduce.

LESSON PLAN

Lesson Plan No.	CA/I/3
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Naheed Akhter
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	Generation of computers (1st to 5th)
Objective	By the end of this lesson students will be able to • identify which technology is used in which generation. Recognize the sign language of different parts of computers.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the name of technology used in which generation on White board. 1. 1st Generation used vacuum Tubes Technology. 2. 2nd Generation used Transistors Technology. 3. 3rd Generation used Integrated chips (ICS). 4. 4th Generation used Microprocessors. 5. 5th Generation used Artificial Intelligence. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language and pictures. • Generation • vacuum Tubes • Transistors • Integrated chips • Microprocessor • Artificial Intelligence. While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device or flash cards which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the generations of computers so that they could reproduce.

LESSON PLAN

Lesson Plan No.	CA/I/4
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Mona Ajaz
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	Describe Uses of Computer system in different Fields.
Objective	By the end of this lesson students will be able to • Identify uses of Computers. • Understand its purpose and benefits Recognize the sign language of different Uses of computers.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following uses of computer on white board 1. Education 2. Banking 3. Hospitals 4. Business 5. Entertainment Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Computer • Uses • Education • Banking • Hospitals • Business • Entertainment While explaining the topic with the help of sign language, the teacher will also show pictures of above mentioned words. Then the students will be asked to take notes.
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the uses of computers so that they could reproduce.

LESSON PLAN

Lesson Plan No.	CA/I/5
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Mona Ajaz
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	Difference between Computer Hardware and Software.
Objective	By the end of this lesson students will be able to - Differentiate between Computer Hardware and Software - Recognize the sign language of Computer Hardware and Software
Materials	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the Difference between Hardware and Software.

Hardware	Software
Hardware are physical parts of computer	Software are computer programs.
It can be seen and touched	It can be seen but cannot be touched.
Monitor, Keyboard etc are example of hardware	Word Excel InPage are example of software

Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language.

- Hardware
- Software
- Physical Parts
- Programs
- Touched
- Monitor, keyboard
- Word, Excel, Inpage

Assessment

While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable.

Once the explanation is complete, the students will be asked to note down lesson in their notebooks

Teacher will ask students to describe the learnt words with the help of sign language

Students will be asked to learn the Difference between Computer Hardware and Software.

LESSON PLAN

Lesson Plan No.	CA/I/6
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I
Author	Mona Ajaz, Naheed Aktar
Grade level	9 th
Time duration	60 minutes
Topic/Question Item	Name the major classification of computer.
Objective	By the end of this lesson students will be able to describe the classifications of computer
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following classification of computer on White board. 1. Personal computer 2. Mini computer 3. Micro computer 4. Super computer 5. Mainframe Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● Computer ● Mini Computer ● Micro Computer ● Super Computer ● Mainframe While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the pictures and flash cards which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the classification of computers.

LESSON PLAN

Lesson Plan No.	CA/I/7
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Syed Tahir Hussain Shah
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Turn on computer system, identify taskbar and recycle bin and turn off the computer.
Objective	By the end of this lesson students will be able to • Turn on computer system turn off the computer. • Identify taskbar and recycle bin Recognize the sign language of different commands of Windows.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following commands of windows on White board. 1. Turn on computer 2. Turn off the computer 3. Identify taskbar 4. Identify recycle bin Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Turn on • Desktop • Start button • Icons • Taskbar • Recycle bin • My Computer • Shutdown / turn off While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable.

Assessment

Once the explanation is complete, the students will be asked to note down lesson in their notebooks

Teacher will ask students to describe the learnt words with the help of sign language and perform computer practical

LESSON PLAN

Lesson Plan No.	CA/I/8
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Syed Tahir Hussain Shah
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Using start menu open MS WORD and then close the MS Word.
Objective	By the end of this lesson students will be able to perform following. ● To Open MS Word. ● To Close MS Word. Recognize the sign language of different commands of MS Word.
Materials	● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following commands of MS Word on White board. 1. Open MS Word 2. Close MS Word Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● MS Word ● Open MS Word ● Close MS Word While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language and perform computer practical.

LESSON PLAN

Lesson Plan No.	CA/I/9
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Hafeez
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Open typing software TIPP 10 and type the following text:
Objective	By the end of this lesson students will be able to perform following. <i>Hello! How are you? Are you learning from the past experiences of life? The person can make himself better after looking at his previous life. Experience is the most precious thing in life that can make a person more skillful and technical.</i>
Materials	● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the above mentioned paragraph on White board/Projector. 1. Open Typing Master Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● Typing Master ● Open Typing Master ● Close Typing Master While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Open typing software and type the above mentioned text in 5 minutes.

LESSON PLAN

Lesson Plan No.	CA/I/10
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Hafeez
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Open MS Word and type following text and apply the formatting given in paragraph.
Objective	By the end of this lesson students will be able to perform following. <u>MICROSOFT WORD</u> Word-processor software launched in “1983” by the Microsoft Corporation. Software developers Richard Brodie and Charles Simonyi joined the Microsoft team in 1981, and in 1983 they released Multi-Tool Word for computers that ran a version of the UNIX operating system (OS).
Materials	● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the above mentioned paragraph on White board/Projector. 1. Open MS Word Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● MS Word ● Open MS Word ● Save MS Word Document ● Close MS Word While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Open MS Word and type the above mentioned text in 10 minutes with same format.

LESSON PLAN

Lesson Plan No.	CA/I/11																				
Title	Model Lesson- Matric Vocational																				
Subject	Computer Application-I (Practical)																				
Author	Muhammad AwaisArslan																				
Grade level	9 th																				
Time duration	30 minutes																				
Topic/Question Item	Open MS word and draw the table.																				
Objective	By the end of this lesson students will be able to draw following table using MS Word. <table><tr><th>Name</th><th>Father's Name</th><th>Class</th><th>Address</th></tr><tr><td>Ali</td><td>Abid</td><td>10</td><td>H.299, E-145, Lahore</td></tr><tr><td>Syed</td><td>Usman</td><td>10</td><td>H.589, F-Block, Lahore.</td></tr><tr><td>Hammad</td><td>Hamza</td><td>10</td><td>H. 245, Ganga Ram, Lahore</td></tr><tr><td>Nouman</td><td>Sheraz</td><td>10</td><td>45-B/II, Lahore.</td></tr></table>	Name	Father's Name	Class	Address	Ali	Abid	10	H.299, E-145, Lahore	Syed	Usman	10	H.589, F-Block, Lahore.	Hammad	Hamza	10	H. 245, Ganga Ram, Lahore	Nouman	Sheraz	10	45-B/II, Lahore.
Name	Father's Name	Class	Address																		
Ali	Abid	10	H.299, E-145, Lahore																		
Syed	Usman	10	H.589, F-Block, Lahore.																		
Hammad	Hamza	10	H. 245, Ganga Ram, Lahore																		
Nouman	Sheraz	10	45-B/II, Lahore.																		
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector																				
Activities and procedures	The teacher will start by writing down the following commands of MS Word on White board. Open MS Word 1. Insert Table 2. Delete Table 3. Format Table Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • MS Word • Table • Insert Table • Format Table • Delete Table While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.																				
Assessment	Teacher will ask students to describe the learnt words with the help of sign language and draw table.																				

LESSON PLAN

Lesson Plan No.	CA/I/12
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Awais Arslan
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Open MS word and insert the picture and make a list as given below: Classroom Rules: • Clean up after yourself. • Respect others. • Listen to the teacher. • Complete assignments on time. • Raise your hand to ask a question.
Objective	By the end of this lesson students will be able to insert picture and Bullets and Numbers into the MS Word.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following commands of MS Word on White board. 1. Open MS Word 2. Insert Picture 3. Insert Bullets and Numbers 4. Insert Clip Art Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • MS Word • Insert Picture • Insert Bullets and Numbers While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt words with the help of sign language and insert the picture in MS Word.

LESSON PLAN

Lesson Plan No.	CA/I/13
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Tahir
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Launch MS Power Point, insert a new slide & save.
Objective	By the end of this lesson students will be able to open MS Power point, insert new slide and save presentation.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following commands of MS Power point on White board / Projector. 1. Open MS Power point 2. Insert new slide 3. Save Presentation Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • MS Power point • Insert • New • Slide • Command • Presentation • Save While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt MS Power point with the help of sign language and insert new slide in MS Power point and save presentation.

LESSON PLAN

Lesson Plan No.	CA/I/14
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Tahir
Grade level	9 th
Time duration	30 minutes
Topic/Question Item	Launch MS Power Point, insert a table and insert a picture.
Objective	By the end of this lesson students will be able to open MS Power point, insert a table and insert a picture.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following commands of MS Power point on White board / Projector. 1. Open MS Power point 2. Insert table 3. Insert picture Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • MS Power point • Insert • Table • Picture • Command While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt MS Power point with the help of sign language and Launch MS Power Point, insert a table and insert a picture in MS Power point.

LESSON PLAN

Lesson Plan No.	CA/II/1
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Mona Ajaz
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What is Internet?
Objective	By the end of this lesson students will be able to • Define the Internet
Materials	Recognize the sign language of Internet. • White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the Definition of internet on White board. The Internet is a vast network that connects computers all over the world. Through the Internet, people can share information and communicate from anywhere with an Internet connection. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Internet • vast • connects • world • Information • Communication • Anywhere Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to Define the Internet.

LESSON PLAN

Lesson Plan No.	CA/II/2
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Mona Ajaz
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What is Web Browser and How Does it Work?
Objective	By the end of this lesson students will be able to • Define the Web Browser • Understand the working of Web Browser. Recognize the sign language of Web Browser.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the Definition of Web Browser and its Working on White board. A Web Browser is software that allows locating, access and display web pages. When a user enters a URL the Browser retrieves web content from server and displays it on the user's device. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Web Brower • Software • locating • Access • Display • Web Page • Content • Server
Assessment	Once the explanation is complete, the students will be asked to note down lesson in their notebooks Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to Define the Web Browser and its working.

LESSON PLAN

Lesson Plan No.	CA/II/3
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Mona Ajaz
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What are Advantages/uses of Internet?
Objective	By the end of this lesson students will be able to Describe the Advantages/uses of Internet.
Materials	Recognize the sign language of Advantages of Internet. - White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the Advantages/uses of Internet on White board. - Internet allows people to learn information about any topic - Internet allows you to sell or buy product. - You can send money and pay bills through internet - Internet provides people to access entertainment like movies and videos. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. - Internet - Learn Information - Sell and Buy Products - Send Money and Pay Bills - Entertainment - Movies and Videos
Assessment	Once the explanation is complete, the students will be asked to note down lesson in their notebooks Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain Advantages/uses of Internet.

LESSON PLAN

Lesson Plan No.	CA/II/4
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Naheed Akhter
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What are disadvantages of Internet?
Objective	By the end of this lesson students will be able to describe the disadvantages of Internet.
Materials	Recognize the sign language of disadvantages of Internet. • White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the disadvantages of Internet on White board. ● Health ● Cybercrime. ● Time ● Virus & Threats ● Privacy exposure. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. ● Health ● Cybercrime. ● Time ● Virus & Threats ● Privacy exposure. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain disadvantages of Internet.

LESSON PLAN

Lesson Plan No.	CA/II/5
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Naheed Akhter
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What is world wide web (WWW)?.
Objective	By the end of this lesson students will be able to • Describe the WWW. • Recognize the sign language of WWW.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the definition of WWW on White board. World-Wide Web (also called WWW or W3) is a hypertext-based information system. The web is a system of interconnected public Webpages accessible through the internet. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • WWW • Interconnected. • accessible • Internet • Public. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain about WWW.

LESSON PLAN

Lesson Plan No.	CA/II/6
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Naheed Akhter
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What is ISP and its purpose?
Objective	By the end of this lesson students will be able to define ISP and its purpose.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the definition of ISP and its purpose on White board. An internet service provider (ISP) is a company that provides access to the internet. ISPs can provide this access through multiple means, including • Dial-up. • DSL, cable. • Wireless. • Fiber-optic. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Internet/ISP. • Dial-up. • DSL, cable. • Wireless. • Fiber-optic. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain ISP.

LESSON PLAN

Lesson Plan No.	CA/II/7
Title	Model Lesson- Matric Vocational
Subject	Computer Application-II
Author	Naheed Akhter
Grade level	10 th
Time duration	60 minutes
Topic/Question Item	What is Search Engine?
Objective	By the end of this lesson students will be able to define Search engine.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the definition of Search engine on White board. A search engine is a coordinated set of programs that searches for and identifies items in a database that match specified criteria. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. ● Search Engine. ● Coordinated. ● Database. ● Match. ● Specified criteria. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
Assessment	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain search engine.

LESSON PLAN

Lesson Plan No.	CA/II/8
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Muhammad Mustafa
Grade level	10 th
Time duration	30 minutes
Topic/Question Item	● Make an email account on Hotmail, Gmail or Yahoo ● Create and send email to your friend. ● Open your email box and download any attached file ● Open your email and forward any email to another friend ● Create a new email, attach any file with it and send it to a friend
Objective	By the end of this lesson students will be able to create an email account on Hotmail, Gmail or Yahoo, Send email and send mail, download file and attach file.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following tasks of Email on White board / Projector. 1. Create an Email account 2. Send email. 3. Download any attached file 4. Forward Email 5. Attach any file while sending Email Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. ● Make, Email, Account, Hotmail, Gmail, Yahoo ● Create, Send, Attachment, Download, Forward While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which is observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt to create Email, send Email with attachment files with the help of sign language and perform the same on computer.

LESSON PLAN

Lesson Plan No.	CA/II/9
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Mustafa Nawaz
Grade level	10 th
Time duration	30 minutes
Topic/Question Item	● Create a new folder and save it on desktop. ● Open Windows and create a folder on desktop ● Open Windows and create a folder and rename it. ● Open Windows and copy a file from any drive and paste it on a folder on desktop ● Open Windows, delete a file and folder from desktop and restore it from recycle bin
Objective	By the end of this lesson students will be able to create, save, rename, delete and restore a folder/file.
Materials	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following tasks of Email on White board / Projector. 1. Create a file / folder and save it 2. rename a file / Folder 3. Delete a file / folder 4. Restore file / folder from recycle bin 5. Copy / Paste Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. Create, File, Folder, Save, Rename, Delete, Restore, Recycle bin and Copy / Paste While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which is observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt to Create, File, Folder, Save, Rename, Delete, Restore, recycle bin and Copy / Paste with the help of sign language and perform the same on computer.

LESSON PLAN

Lesson Plan No.	CA/II/10
Title	Model Lesson- Matric Vocational
Subject	Computer Application-I (Practical)
Author	Syed Tahir Hussain Shah
Grade level	10 th
Time duration	30 minutes
Topic/Question Item	Open In-page software and type a paragraph of 5 lines
Objective	By the end of this lesson students will be able open In-Page software and type text into it.
Materials	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
Activities and procedures	The teacher will start by writing down the following tasks of Email on White board / Projector. - Open Inpage - Type Text Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. - Open - InPage - Type - Text While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks.
Assessment	Teacher will ask students to describe the learnt to open InPage and type a paragraph with the help of sign language and perform the same on computer.

LESSON PLAN

Lesson Plan No.	CA/II/11																														
Title	Model Lesson- Matric Vocational																														
Subject	Computer Application-I (Practical)																														
Author	Muhammad Hafeez																														
Grade level	10 th																														
Time duration	30 minutes																														
Topic/Question Item	● Open MS excel and create a table comprising 5 columns and 5 rows. Put formula of addition or use SUM function in the last cell of every column so that values in previous cells of every column are added.																														
Objective	By the end of this lesson students will be able to create a Table in MS Excel and perform sum function for addition.																														
Materials	● White Board ● Marker ● Duster ● Flash cards ● Chart ● Presentation Multimedia projector																														
Activities and procedures	The teacher will start by writing down the following tasks of Email on White board / Projector. <table><tr><td>10</td><td>20</td><td>20</td><td>30</td><td>40</td></tr><tr><td>50</td><td>25</td><td>60</td><td>70</td><td>35</td></tr><tr><td>12</td><td>18</td><td>45</td><td>45</td><td>30</td></tr><tr><td>41</td><td>71</td><td>91</td><td>51</td><td>54</td></tr><tr><td>20</td><td>12</td><td>51</td><td>41</td><td>41</td></tr><tr><td>133</td><td>146</td><td>267</td><td>237</td><td>200</td></tr></table> Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. ● MS Excel ● Table ● Create ● Column ● Row ● Formula ● Sum ● Addition ● Values While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable.	10	20	20	30	40	50	25	60	70	35	12	18	45	45	30	41	71	91	51	54	20	12	51	41	41	133	146	267	237	200
10	20	20	30	40																											
50	25	60	70	35																											
12	18	45	45	30																											
41	71	91	51	54																											
20	12	51	41	41																											
133	146	267	237	200																											

Assessment

Once the explanation is complete, the students will be asked to note down lesson in their notebooks.

Teacher will ask students to describe the learnt to Open MS excel and create a table and put formula of addition o with the help of sign language and perform the same on computer.

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LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/1
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware & Networks-I
<i>Author</i>	Muhammad Mudassar Younis
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What are digital devices?
<i>Objective</i>	By the end of this lesson students will be able to Understand the about digital devices Recognize the sign language of digital devices.
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down about digital devices on White board. - Digital devices operate by using digital data or signals. - These devices process, store and transmit data in digital form i.e. 0 or 1. - Examples: Computers, Mobile Phones, Televisions, Digital Watches Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. Operate Digital data Signals Device Process Store Transmit Mobile Phone Televisions Digital Watches Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language input Students will be asked about digital devices.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/2
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Muhammad Mudassar Younis
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is Modem?
<i>Objective</i>	By the end of this lesson students will be able to • Identify the Modem • Understand the purpose of Modem
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down regarding Modem • Modem stands for Modulator/De-Modulator • It converts digital data to analogue signals and analogue signals to digital data • Modem is essential for Internet communications Keeping in view the limitation of hearing impaired children teacher will describe the terms associated with Modem with the help of sign language. • Modem • Modulator/De-Modulator • Convert • Digital data • Analogue signals • Essential • Internet communications While explaining the above mentioned with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked regarding Modulator.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/3
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware & Networks-I
<i>Author</i>	Muhammad Mudassar Younis
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is Router?
<i>Objective</i>	By the end of this lesson students will be able to • Identify Router • Understand its purpose and benefits Recognize the sign language of Router, purpose and benefits.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the following about Router 1. It is a networking device 2. Its forward data packets between computer and network 3. It uses techniques to send data over best route 4. It ensures delivery of data packets Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Networking device • Data packets • Network • Technique • Send • Delivery • Best Route While explaining the topic with the help of sign language, the teacher will also show pictures of above mentioned words Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the uses and benefits of Router

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/4										
<i>Title</i>	Lesson Plan- Matric Vocational										
<i>Subject</i>	Computer Hardware & Networks-I										
<i>Author</i>	Muhammad Mudassar Younis										
<i>Grade level</i>	9 th										
<i>Time duration</i>	40 minutes										
<i>Topic/Question Item</i>	Difference between Hub and Switch										
<i>Objective</i>	By the end of this lesson students will be able to Differentiate between Hub and Switch Recognize the sign language of Hub and Switch										
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector										
<i>Activities and procedures</i>	The teacher will start by writing down the Difference between Hub and Switch. <table border="1"> <thead> <tr> <th>Hub</th><th>Switch</th></tr> </thead> <tbody> <tr> <td>Simple communication device</td><td>Intelligent communication device</td></tr> <tr> <td>It broadcast the data</td><td>It unicast the data</td></tr> <tr> <td>Inexpensive</td><td>Expensive</td></tr> <tr> <td>Use In small networks</td><td>Use in large networks</td></tr> </tbody> </table> Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. Simple Intelligent Communication device Broadcast Unicast Expensive Inexpensive Small Large While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item/device which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks	Hub	Switch	Simple communication device	Intelligent communication device	It broadcast the data	It unicast the data	Inexpensive	Expensive	Use In small networks	Use in large networks
Hub	Switch										
Simple communication device	Intelligent communication device										
It broadcast the data	It unicast the data										
Inexpensive	Expensive										
Use In small networks	Use in large networks										
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to learn the difference Hub and Switch.										

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/5
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	Ali Hassan
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is Network Card?
<i>Objective</i>	By the end of this lesson students will be able to • Define Network Card Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the definition of Network Card on White board. It is an electronic device that connects a computer to a computer network, usually a LAN.it is also called NIC. It is directly plugged into computer's motherboard.  Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • improves • Electronic • Mother board • Device • Connect • Plugged • LAN While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define Network Card.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/6
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	M. Mursaleen
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is usage of graphics card?
<i>Objective</i>	By the end of this lesson students will be able to • Describe the usage of graphics card? Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the usage of graphics card on white board. 1. Graphics card improves the computer graphics. 2. It improves the quality of videos, images and games. 3. It is use for 2D and 3D images.  Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • improves • Graphics • Videos • Images • Games • 2D & 3D While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/7
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	Ali Hassan
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is the difference between CPU & system unit?
<i>Objective</i>	By the end of this lesson students will be able to Differentiate between System Unit Vs CPU Recognize the sign language of ports and their names.
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the differentiate between System Unit Vs CPU

System Unit	CPU
It is a case	It is also called brain of computer
It contains electronic components of computer	It is an electronic component
	

Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language.

- **Case**
- **Brain**
- **Electronic**
- **Component**
- **System unit**
- **CPU**

While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable.

<i>Assessment</i>	Once the explanation is complete, the students will be asked to note down lesson in their notebooks
	Teacher will ask students to describe the learnt words with the help of sign language
	Students will be asked to differentiate between System Unit and CPU

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/8
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Asma Shiraz
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Functions of System Unit
<i>Objective</i>	By the end of this lesson students will be able to Describe the Functions of System Unit Recognize the sign language of ports and their names.
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the Function of System Unit. System unit holds other components of computer. It protects sensitive electronic components of computer. It provides basic power supply unit. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. System unit Function Holds Component Power supply Protects Sensitive Electronic While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain functions of system Unit

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/9
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	Ali Hassan
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is mother board?
<i>Objective</i>	By the end of this lesson students will be able to • Define Motherboard Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the definition of motherboard. It is the main printed circuit board of computer. It connects all of the internal components, e.g memory, processor, graphics card and other hardware. It also provides power to each component and allows them to communicate.  Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Printed circuit board (PCB) • Connect • Internal • Components • Memory • Processor • Graphics card • Hardware • Power • communicate While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain the motherboard.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/10
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Asma Shiraz
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is difference Between RAM and ROM?
<i>Objective</i>	By the end of this lesson students will be able to Differentiate Between RAM and ROM Recognize the sign language of RAM and ROM.
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the following content on White board.

RAM	ROM
RAM stands for Random Access Memory	ROM stands for Read Only Memory
It is volatile memory.	It is non-volatile memory.
RAM is a temporary Storage	ROM is a permanent storage
We can read write data in RAM	We can only read this memory and cannot write through it
The data in the RAM can be changed or deleted	The instructions written in ROM cannot be changed or deleted

Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language.

- **RAM and ROM**
- **Volatile**
- **Storage**
- **Temporary**
- **Permanent**
- **Read and Write**
- **Data**
- **Memory**
- **Delete/ change**

While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable.

Once the explanation is complete, the students will be asked to note down lesson in their notebooks

Assessment

Teacher will ask students to describe the learnt words with the help of sign language

Students will be asked to learn RAM, ROM and its difference.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/11
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	M. Mursleen
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is hard disk drive?
<i>Objective</i>	By the end of this lesson students will be able to • Define hard disk drive. Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the what is hard disk drive? It is a magnetic storage device. It consists of metal plates and controller circuit. The data is stored on both sides of plates.it is non-volatile memory. It has large storage capacity. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Hard Disk • Magnetic • Storage • Device • Metal • Plates • Controller Circuit • Side • Plates • Non-Volatile • Memory • Storage Capacity While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain the hard disk drive.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/12
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	Ali Hassan
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is Function of Power Supply?
<i>Objective</i>	By the end of this lesson students will be able to • describe the function of power supply. Recognize the sign language of function of power supply.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the what is function of power supply? It is a hardware device that converts AC electricity into DC electricity and then distributes it to all components of the computer. The power cable is plugged into it. It has an I/O power switch on it.  Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Power Supply • Hardware device • Coverts • Electricity • AC • DC • distribute • Power cable • Plugged • Power switch

Assessment

While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks

Teacher will ask students to describe the learnt words with the help of sign language

Students will be asked to explain the function of power supply.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/13
<i>Title</i>	Model Lesson- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks I
<i>Author</i>	M. Mursleen
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is processor?
<i>Objective</i>	By the end of this lesson students will be able to • Define a processor Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the definition of processor. It is the brain of computer. It processes input into output and controls the speed of computer. It consists of two units. 1. Arithmetic and logic unit 2. Control unit Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Brain • Processes • Input • Output • Controls • Speed of computer • Arithmetic and Logic Unit • Control Unit While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to explain the processor.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/14
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networking I
<i>Author</i>	Asma Shiraz
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is Port? Name its types
<i>Objective</i>	By the end of this lesson students will be able to • Define port and name its types Recognize the sign language of ports and their names.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the definition of port and its types on White board. Port is a Physical point provided on computer using which an external device can be connected to the computer. There are three main types of ports. 1: Serial Port 2: Parallel Port 3: USB Port Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Port • Physical Point • External Device • Connected • Serial Port • Parallel Port • USB Port While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual item which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define Port and its types.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/15
<i>Title</i>	Lesson Plan (Practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Farrukh Jamil
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Assemble and De-assemble Processor
<i>Objective</i>	By the end of this lesson students will be able to • Assemble and De-assemble Processor on computer. Recognize the sign language of Assemble and De-assemble Processor.
<i>Materials</i>	• White Board • Marker • Duster • Computer • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the process of Assemble and De-assemble Processor. <u>De-assemble</u> 1. Unplug the power cable from computer 2. Un-screw the bolts of System unit 3. Take the side cover off 4. Remove Fan and heat sink. 5. Push the Unlock Clips down. 6. Remove the Processor from slot. <u>Assemble</u> 1. Insert the Processor in the slot. 2. Lock the clip. 3. Fix the Heat sink and Fan. 4. Place the cover of system unit 5. Screw the bolts Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Un-Plug • Insert • Fix • Push down • Fan • Heat sink • Power Cable • Cover • System unit • bolts

Assessment

While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual items which are observable.

Once the explanation is complete, the students will be asked to note down lesson in their notebooks and perform the practical on computer.

Teacher will ask students to describe the learnt words with the help of sign language

Students will be asked to Assemble and Disassemble the Processor on computer.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/16
<i>Title</i>	Lesson Plan (Practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Farrukh Jamil
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Assemble and De-assemble DVD ROM
<i>Objective</i>	By the end of this lesson students will be able to • Assemble and De-assemble DVD ROM on computer. Recognize the sign language of Assemble and De-assemble DVD ROM.
<i>Materials</i>	• White Board • Marker • Duster • Computer • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the process of Assemble and Disassemble DVD ROM. <u>De-assemble</u> 1. Unplug the power cable from computer 2. Un-screw the bolts of System unit 3. Take the side cover off 4. Unplug the power and data cables of DVD ROM 5. Un-screw the bolts of DVD ROM 6. Push the DVD ROM out of the system unit <u>Assemble</u> 1. Insert the DVD ROM in system unit 2. Tight the screws 3. Plug-in the power and data cables of DVD ROM 4. Place the cover of system unit 5. Screw the bolts Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Un-Plug /Plug • Power Cable • Cover • System unit • Push out • bolts While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual items which are observable. Once the explanation is complete, the students will be asked to note down

<i>Assessment</i>	lesson in their notebooks and perform the practical on computer. Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to Assemble and Disassemble the DVD ROM on computer.
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LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/17
<i>Title</i>	Lesson Plan (Practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Farrukh Jamil
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Install MS Windows 10 on computer
<i>Objective</i>	By the end of this lesson students will be able to • Install Windows 10 on computer. Recognize the sign language of installation process of MS Windows 10.
<i>Materials</i>	• White Board • Marker • Duster • Computer • MS Windows 10 Software • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the installation process of MS Windows 1. Insert MS Windows 10 CD/DVD 2. Boot from CD/ DVD. 3. Click Next. 4. Click Install Now. 5. Enter your Product Key & Click Next. 6. Select type of Installation what you want. 7. Follow the On-Screen instructions to Install MS Windows 10. 8. Remove the CD/DVD after completion. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Insert • Boot • MS Windows 10 • CD/DVD • Product Key • On Screen • Select • Install / Installation • Remove While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual items which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks and perform the practical on computer.
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to Install the MS Windows 10 on computer.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/I/18
<i>Title</i>	Lesson Plan (Practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Farrukh Jamil
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Install MS Office on computer (Practical)
<i>Objective</i>	By the end of this lesson students will be able to • Install MS Office on computer. Recognize the sign language of installation process of MS Office.
<i>Materials</i>	• White Board • Marker • Duster • Computer • MS Office Software • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the installation process of MS Office. 1. Insert MS Office CD/DVD 2. Enter Product Key 3. Read MS Office License term and accept. 4. Choose installation option. 5. Click "Install". 6. Wait for installation to complete. 7. Remove MS Office CD/DVD after completion. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Insert • MS Office • CD/DVD • Product Key • License Terms • Accept • Install / Installation • Remove While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual items which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks and perform the practical on computer.
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to Install the MS Office on computer.

LESSON PLAN

<i>Lesson plan No.</i>	CHN/II/1
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Nazmeen Afzal
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is network? Write its types.
<i>Objective</i>	By the end of this lesson students will be able to • Describe network and its types. Recognize the sign language of network and its types.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down definition of network and names of its types Network When two or more computers share their resources, it is called a network. There are three main types of the networks 1. LAN 2. MAN 3. WAN Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Resources • share • network • types • LAN • MAN • WAN Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language
	Students will be asked to define computer network and its types.

LESSON PLAN

<i>Lesson plan No.</i>	CHN/II/2
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Nazmeen Afzal
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is LAN?
<i>Objective</i>	By the end of this lesson students will be able to • Describe LAN (definition & abbreviation). Recognize the sign language of definition of LAN.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down definition of LAN LAN LAN stands for Local Area Network. It is small geographical network within a building. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Network • Lan • Local • Area • Geographical • Building • Stands For Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define LAN

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/3
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Shahida Tufail
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is MAN?
<i>Objective</i>	By the end of this lesson students will be able to • Describe MAN (definition & abbreviation). Recognize the sign language of definition of MAN.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down definition of MAN MAN MAN stands for Metropolitan Area Network. It is small geographical network within a city. Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Network • Man • Metropolitan • Area • Geographical • Stands For Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define MAN

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/4
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Nazmeen Afzal
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is WAN?
<i>Objective</i>	By the end of this lesson students will be able to • Describe WAN (definition & abbreviation). Recognize the sign language of definition of WAN.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down definition of WAN WAN WAN stands for World Area Network. It is a large geographical network covers whole world. Example: internet Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Network • Wan • Wide • Area • Geographical • World • Stands For • Internet Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define WAN

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/5
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Shahida Tufail
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	What is server and client?
<i>Objective</i>	By the end of this lesson students will be able to • define Server & Client Recognize the sign language of definition of Server and Client.
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down definition of server and client Server The computer providing services is called a server in a network Client The computer asking for a service is called a client in a network Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Network • Providing • Asking For • Service • Server • Client Once the explanation is complete, the students will be asked to note down lesson in their notebooks
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to define server and client

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/6								
<i>Title</i>	Lesson Plan- Matric Vocational								
<i>Subject</i>	Computer Hardware and Networks-II								
<i>Author</i>	Asma Shiraz								
<i>Grade level</i>	10 th								
<i>Time duration</i>	40 minutes								
<i>Topic/Question Item</i>	Difference between Input and Output Devices								
<i>Objective</i>	By the end of this lesson students will be able to Differentiate between Input and Output Devices. Recognize the sign language of Input and Output devices.								
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector								
<i>Activities and procedures</i>	The teacher will start by writing down the difference of Input and Output devices on White board. <table border="1"> <thead> <tr> <th>Input Devices</th><th>Output Devices</th></tr> </thead> <tbody> <tr> <td>An input device is used to enter data in computer.</td><td>An Output device is used to get information from computer.</td></tr> <tr> <td>Input devices are controlled by the users</td><td>Output Devices are controlled by the computers</td></tr> <tr> <td>Examples: Mouse, Keyboard</td><td>Examples: Monitor, Printer</td></tr> </tbody> </table> Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. - Input - Device - Output - Use - Enter - Information - Get - Example - Mouse, Keyboard - Monitor, Printer Once the explanation is complete, the students will be asked to note down lesson in their notebooks	Input Devices	Output Devices	An input device is used to enter data in computer.	An Output device is used to get information from computer.	Input devices are controlled by the users	Output Devices are controlled by the computers	Examples: Mouse, Keyboard	Examples: Monitor, Printer
Input Devices	Output Devices								
An input device is used to enter data in computer.	An Output device is used to get information from computer.								
Input devices are controlled by the users	Output Devices are controlled by the computers								
Examples: Mouse, Keyboard	Examples: Monitor, Printer								
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to elaborate the difference between Input and Output devices.								

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/7								
<i>Title</i>	Lesson Plan- Matric Vocational								
<i>Subject</i>	Computer Hardware and Networks-II								
<i>Author</i>	Asma Shiraz								
<i>Grade level</i>	10 th								
<i>Time duration</i>	40 minutes								
<i>Topic/Question Item</i>	Difference between LAN and WAN.								
<i>Objective</i>	By the end of this lesson students will be able to • Differentiate between LAN and WAN. Recognize the sign language of LAN and WAN.								
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector								
<i>Activities and procedures</i>	The teacher will start by writing down the difference of LAN and WAN on White board. <table border="1"> <thead> <tr> <th>LAN</th><th>WAN</th></tr> </thead> <tbody> <tr> <td>LAN is a network with small geographical area</td><td>WAN covers greater distance and operate worldwide.</td></tr> <tr> <td>LAN operates at a faster speed</td><td>Wan is slower than LAN</td></tr> <tr> <td>Data transfers more quickly through LAN</td><td>WAN transmits data at a slower rate than LAN</td></tr> </tbody> </table> Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • LAN • WAN • network • small geographical area • greater distance • operate worldwide • faster speed • slower speed • transfer/transmit Once the explanation is complete, the students will be asked to note down lesson in their notebooks	LAN	WAN	LAN is a network with small geographical area	WAN covers greater distance and operate worldwide.	LAN operates at a faster speed	Wan is slower than LAN	Data transfers more quickly through LAN	WAN transmits data at a slower rate than LAN
LAN	WAN								
LAN is a network with small geographical area	WAN covers greater distance and operate worldwide.								
LAN operates at a faster speed	Wan is slower than LAN								
Data transfers more quickly through LAN	WAN transmits data at a slower rate than LAN								
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to elaborate the difference between LAN and WAN.								

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/8
<i>Title</i>	Lesson Plan- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Asma Shiraz
<i>Grade level</i>	10 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Write a note on Peripheral Devices.
<i>Objective</i>	By the end of this lesson students will be able to Describe Peripheral Devices. Recognize the sign language of peripheral devices.
<i>Materials</i>	- White Board - Marker - Duster - Flash cards - Chart - Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down a note on peripheral devices on White board. Peripherals Devices are commonly divided into three kinds. - Input Devices - Output Devices - Storage Devices An Input device is any hardware device that sends data to a computer. An Output device is a hardware that receives data from computer. A storage Device is used to store data on computer. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. Peripheral Devices Input Devices Output Devices Storage Devices Hardware Device Sends Data Receives Data Store Data Once the explanation is complete, the students will be asked to note down lesson in their notebooks. Practical Activity: - Attach/ Detach LCD/LED with system unit. - Attach/ Detach Printer with system unit.
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language Students will be asked to describe peripheral devices.

LESSON PLAN

<i>Lesson Plan No.</i>	CHN/II/9
<i>Title</i>	Lesson Plan (practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-II
<i>Author</i>	Nazmeen Afzal
<i>Grade level</i>	10 th
<i>Time duration</i>	120 minutes
<i>Topic/Question Item</i>	How to install WinRAR?
<i>Objective</i>	By the end of this lesson students will be able to • Install Winrar Recognize the sign language of installation of WinRAR
<i>Materials</i>	• White Board • Marker • Duster • Flash cards • Chart • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the steps to be followed for the installation of WinRAR 1. check for the backup of winrar if not available download from internet or use CD 2. Check download/backup folder click executable file of winrar 3. Click yes to confirm make changes in the system 4. Setup will started click install button 5. After installation select all formats and click ok 6. Click done button 7. Winrar installed successfully Keeping in view the limitation of hearing-impaired children teacher will describe the following words with the help of sign language. • Backup • WINRAR • Download • Executable • Confirm • Changes • Install • Button • Formats • Select • Successfully Once the explanation is complete, the students will be asked to note down lesson in their notebooks and perform all steps in lab
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language. Students will be asked to perform all steps.

LESSON PLAN

<i>Lesson Plan No</i>	CHN/II/10
<i>Title</i>	Lesson Plan (Practical)- Matric Vocational
<i>Subject</i>	Computer Hardware and Networks-I
<i>Author</i>	Muhammad Muddasir Younis
<i>Grade level</i>	9 th
<i>Time duration</i>	40 minutes
<i>Topic/Question Item</i>	Install AVAST Anti-Virus Software on computer (Practical)
<i>Objective</i>	By the end of this lesson students will be able to • Install AVAST Anti-Virus Software on computer. Recognize the sign language of installation process of AVAST Anti-Virus Software.
<i>Materials</i>	• White Board • Marker • Duster • Computer • AVAST Anti-Virus Software • Presentation Multimedia projector
<i>Activities and procedures</i>	The teacher will start by writing down the installation process of AVAST Anti-Virus Software. 1. Insert AVAST Anti-Virus Software CD/DVD 2. RUN the AVAST Setup File. 3. Follow the prompts to install the AVAST 4. Wait for installation to complete. 5. Remove AVAST Anti-Virus Software CD/DVD after completion. Keeping in view the limitation of hearing impaired children teacher will describe the following words with the help of sign language. • Insert • AVAST Anti-Virus Software • CD/DVD • Follow • Run • Prompts • Install / installation • Remove While explaining the above mentioned words with the help of sign language, the teacher will also associate them with the actual items which are observable. Once the explanation is complete, the students will be asked to note down lesson in their notebooks and perform the practical on computer.
<i>Assessment</i>	Teacher will ask students to describe the learnt words with the help of sign language. Students will be asked to Install the AVAST Anti-Virus Software on computer.

PRESENTATIONS





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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	What is Computer?
LESSON PLAN CODE:	CA/I/1
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- What is computer?
- Example
- Question & answers
- Assessment



WHAT IS COMPUTER?

Vocabulary

- *Computer*
- *Electronic*
- *Device*
- *Input*
- *Process*
- *Useful*
- *Information*
- *Store*

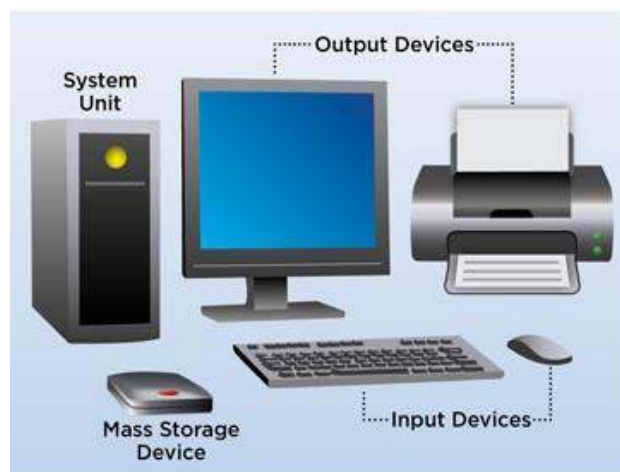
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WHAT IS COMPUTER?

Computer is an electronic device that takes

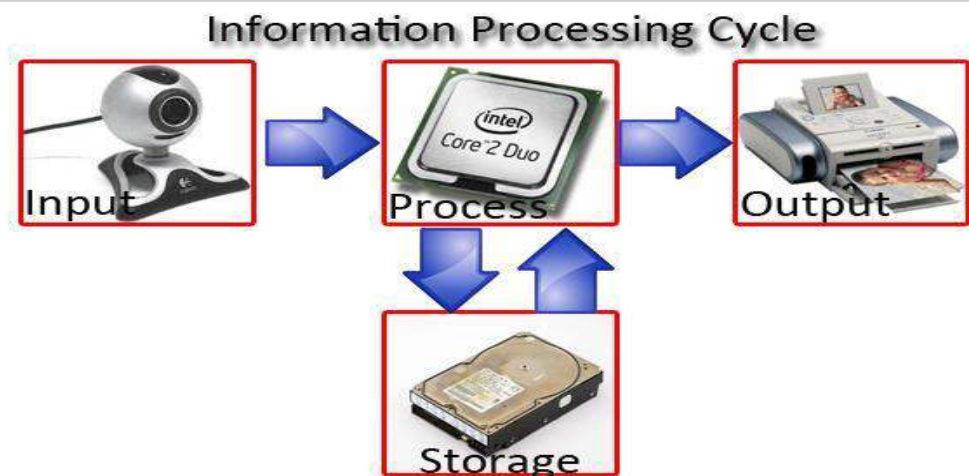
- input,
- processes data,
- Produce Output,
- stores data.



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EXAMPLE



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the definition of computers so that they could reproduce.

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Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Identify Common parts of computer?
LESSON PLAN CODE:	CA/1/2
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- Identify Common parts of computer?
- Example
- Question & answers
- Assessment



Identify common parts of computer?

Vocabulary

- Input Devices
- Output Devices
- Storage Devices
- Processing Unit (CU, ALU)

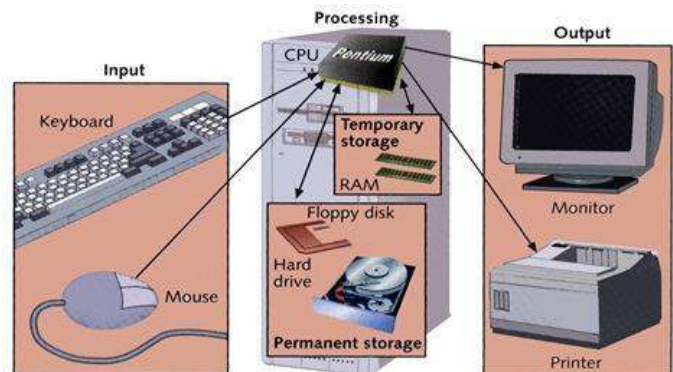
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IDENTIFY COMMON PARTS OF COMPUTER?

- There are five basic parts of computer

- Input Devices
- Output Devices
- Storage Devices
- Processing Unit (CU, ALU)



Computer activity consists of input, processing, storage, and output

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EXAMPLE

INPUT DEVICES



KEYBOARD



SCANNER



JOYSTICK



MOUSE



LIGHT PEN



WEBCAM



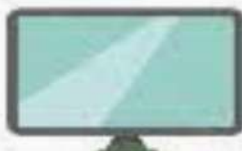
MICROPHONE

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EXAMPLE

OUTPUT DEVICES



MONITOR



PRINTER



SPEAKER



HEADPHONE

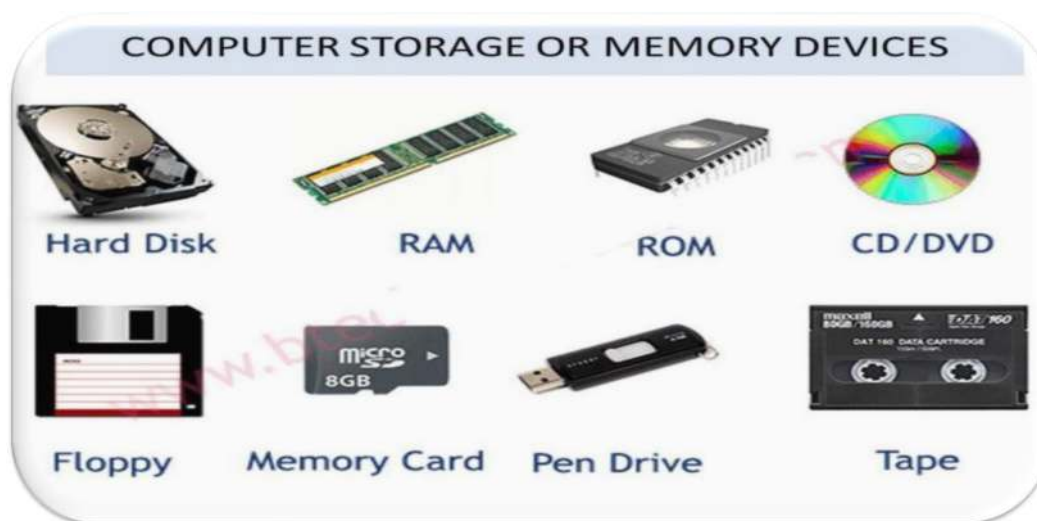


PROJECTOR

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STORAGE UNIT



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the common parts of computers so that they could reproduce.

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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Generation of computers (1st to 5 th)?
LESSON PLAN CODE:	CA/I/3
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- 1st Generation used vacuum Tubes.
- 2nd Generation used Transistors .
- 3rd Generation used Integrated chips (ICS).
- 4th Generation used Microprocessors.
- 5th Generation used Artificial Intelligence.
- Question & answers
- Assessment



IDENTIFY COMMON PARTS OF COMPUTER?

Vocabulary

- Generation
- vacuum Tubes
- Transistors
- Integrated chips
- Microprocessor
- Artificial Intelligence.

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1st GENERATION TECHNOLOGY

- vacuum Tubes

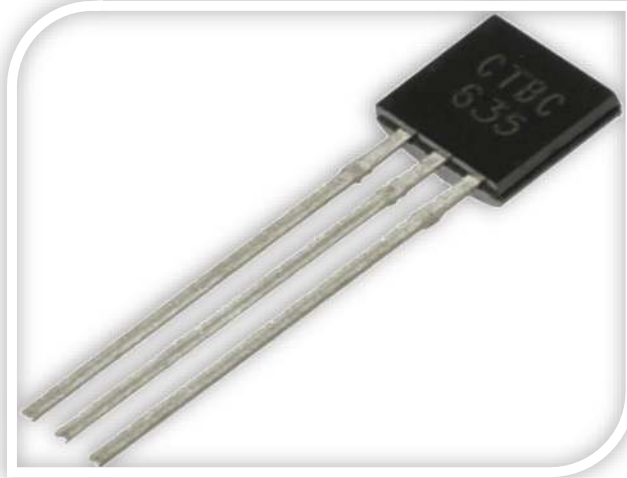


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2nd GENERATION TECHNOLOGY

- Transistors



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3rd GENERATION

- Integrated chips (ICS).



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4th GENERATION

- Microprocessors



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5th GENERATION

- Artificial Intelligence



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the generations of computers so that they could reproduce.



Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Describe Uses of Computer system in different Fields?
LESSON PLAN CODE:	CA/I/4
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Describe Uses of Computer system in different Fields
- Question & answers
- Assessment

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DESCRIBE USES OF COMPUTER SYSTEM IN DIFFERENT FIELDS

- Education
- Banks
- Hospitals
- Business
- Entertainment

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DESCRIBE USES OF COMPUTER SYSTEM IN DIFFERENT FIELDS

- **Education**



- **Banking**



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- **Hospitals**



- **Business**



- **Entertainment**



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the uses of computers so that they could reproduce.



Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Describe difference between hardware and software?
LESSON PLAN CODE:	CA/1/5
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Difference between computer hardware and software
- Hardware
- Software
- Question & answers
- Assessment

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DIFFERENCE BETWEEN COMPUTER HARDWARE AND SOFTWARE

Vocabulary

- Hardware
- Software
- Physical Parts
- Programs
- Touched
- Monitor, keyboard
- Word, Excel, Inpage

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DIFFERENCE BETWEEN COMPUTER HARDWARE AND SOFTWARE

Software

- Software are computer programs.
- It can be seen but cannot be touched.
- Word Excel Inpage are example of software.



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DIFFERENCE BETWEEN COMPUTER HARDWARE AND SOFTWARE

Hardware

- Hardware are physical parts of computer
- It can be seen and touched.
- Monitor, Keyboard etc are example of hardware



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DIFFERENCE BETWEEN COMPUTER HARDWARE AND SOFTWARE

Hardware	Software
• Hardware are physical parts of computer	• Software are computer programs.
• It can be seen and touched	• It can be seen but cannot be touched.
• Monitor, Keyboard etc are example of hardware	• Word Excel Inpage are example of software

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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the difference between hardware and software so that they could reproduce.

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Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Classification of Computer
LESSON PLAN CODE:	CA/I/6
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- Classification of computer
- Question & answers
- Assessment



CLASSIFICATION OF COMPUTER

Vocabulary

- Computer
- Mini Computer
- Micro Computer
- Super Computer
- Mainframe

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CLASSIFICATION OF COMPUTER

Personal computer



Mini computer



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CLASSIFICATION OF COMPUTER

Micro computer



Super computer



Mainframe



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the classifications of computers so that they could reproduce.

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-1	Computer Fundamental
TOPIC	Turn on computer system, identify taskbar, recycle bin and turn off the computer
LESSON PLAN CODE:	CA/1/7
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- Turn on computer system
- Identify Taskbar
- Recycle Bin
- Turn Off The Computer.
- Question & answers
- Assessment



TURN ON / OFF COMPUTER SYSTEM, IDENTIFY TASKBAR, RECYCLE BIN

Vocabulary

- Turn on
- Desktop
- Start button
- Icons
- Taskbar
- Recycle bin
- My Computer
- Shutdown / turn off

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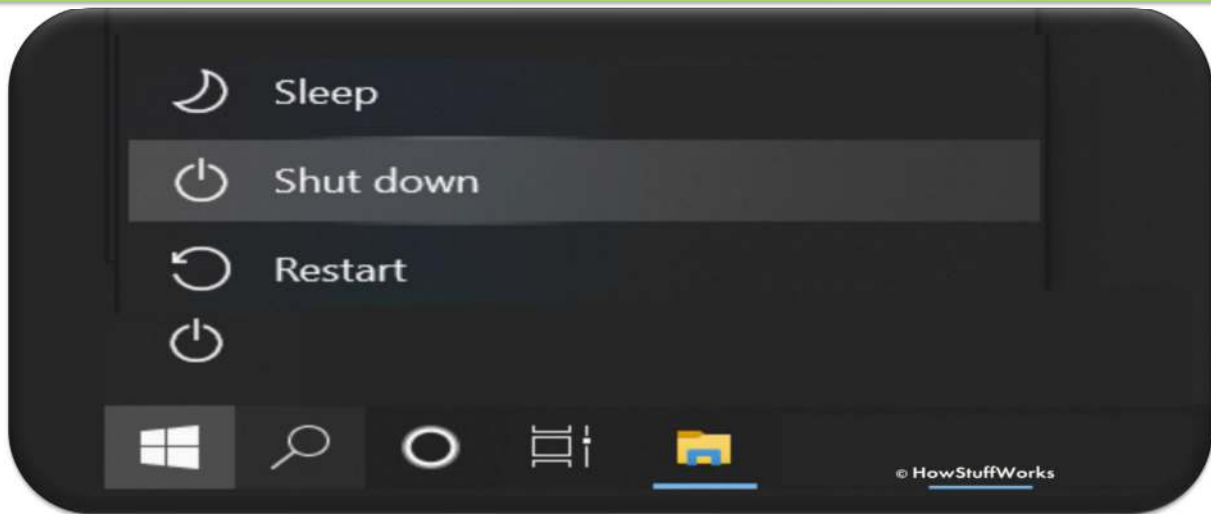
HOW TO TURN ON COMPUTER SYSTEM?



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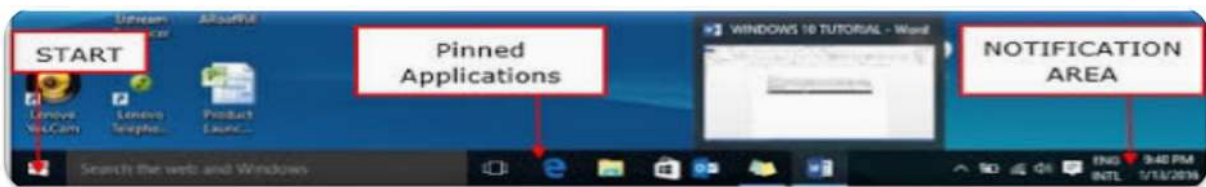
HOW TO TURN OFF COMPUTER SYSTEM?



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IDENTIFICATION OF TASKBAR



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IDENTIFICATION OF RECYCLE BIN ICON



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to perform the task to on and off the computer

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-2	Operating System
TOPIC	Using start menu open MS WORD and then close the MS Word
LESSON PLAN CODE:	CA/I/8
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- MS Word
- Open MS Word
- Close MS Word



VOCABULARY

- Start
- Menu
- Open
- MS WORD
- Close

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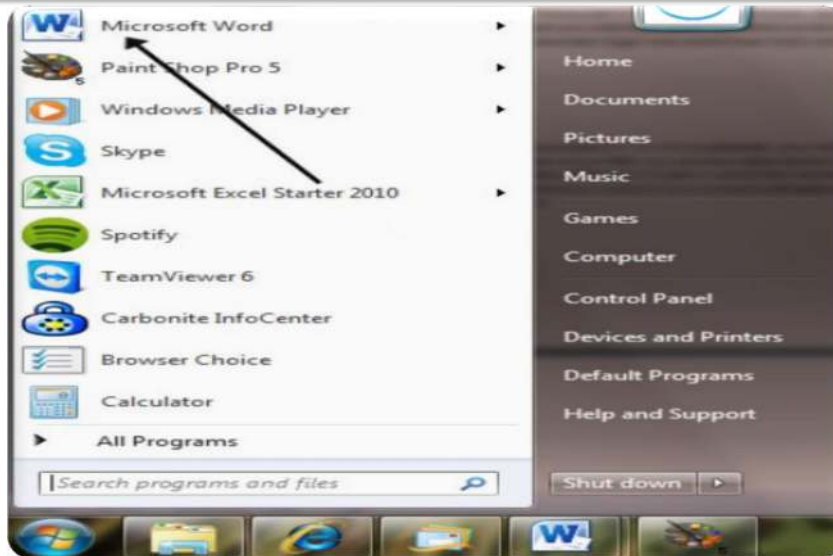
USING START MENU OPEN MS WORD AND THEN CLOSE THE MS WORD

- Using start menu open MS WORD
- Close the MS Word

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USING START MENU OPEN MS WORD



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CLOSE THE MS WORD



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the definition of computers so that they could reproduce.



Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-2	Operating System
TOPIC	Open typing software TIPP 10 and type the text
LESSON PLAN CODE:	CA/1/9
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Typing Master
- Open Typing Master
- Close Typing Master
- Question & Answers
- Assessment

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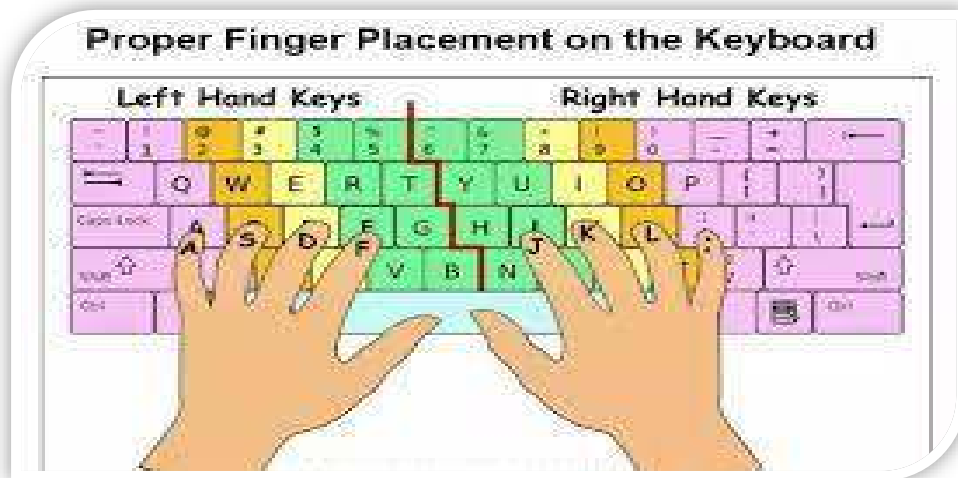
VOCABULARY

- Typing Master
- Open Typing Master
- Close Typing Master

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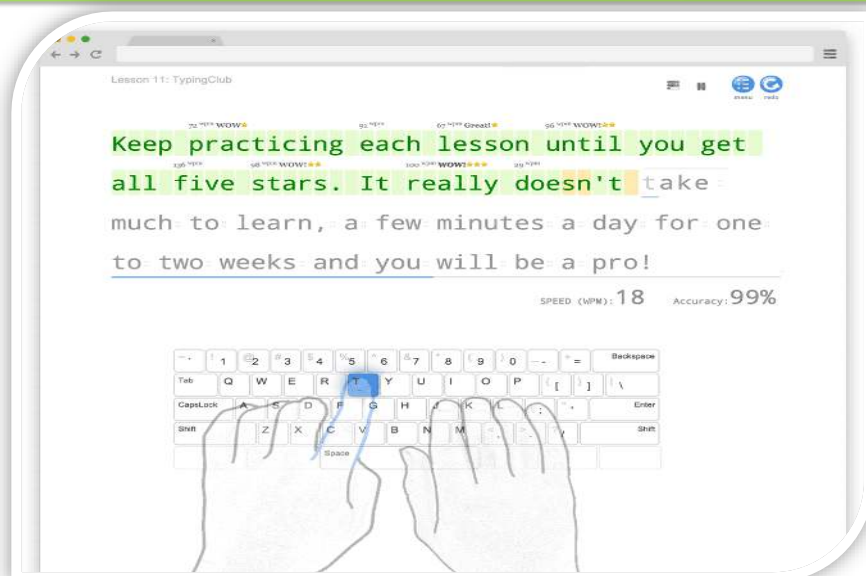
OPEN TYPING SOFTWARE TIPP 10



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TYPING TEXT



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ASSESSMENT

- By the end of this lesson students will be able to perform following.
- Open typing software and type the text in 5 minutes.

Hello! How are you? Are you learning from the past experiences of life? The person can make himself better after looking at his previous life. Experience is the most precious thing in life that can make a person more skillful and technical.



Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-2	Operating System
TOPIC	Open MS Word and type following text and apply the formatting given in paragraph
LESSON PLAN CODE:	CA/I/10
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Open MS Word
- Typing Paragraph
- Close MS Word
- Question & Answers
- Assessment

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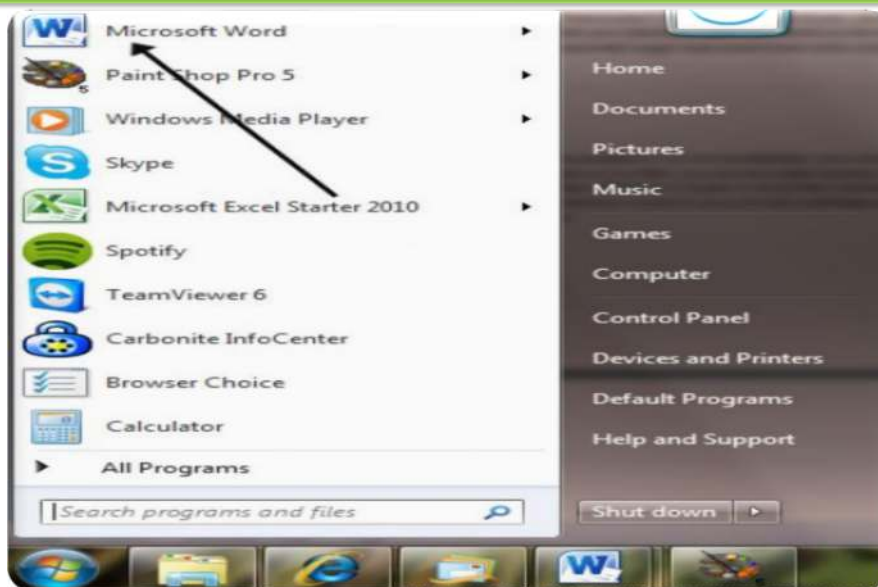
HOW TO OPEN, SAVE AND CLOSE MS WORD

- MS Word
- Open MS Word
- Save MS Word Document
- Close MS Word

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OPEN MS WORD



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TYPE FOLLOWING TEXT AND APPLY THE FORMATTING GIVEN IN PARAGRAPH

MICROSOFT WORD

Word-processor software launched in “1983” by the Microsoft Corporation. Software developers Richard Brodie and Charles Simonyi joined the Microsoft team in 1981, and in 1983 they released Multi-Tool Word for computers that ran a version of the UNIX operating system (OS).

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CLOSE THE MS WORD



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ASSESSMENT

- By the end of this lesson students will be able to perform following.
- Open MS Word and type following text and apply the formatting given in paragraph

MICROSOFT WORD

Word-processor software launched in “1983” by the Microsoft Corporation. Software developers **Richard Brodie** and **Charles Simonyi** joined the *Microsoft team* in 1981, and in 1983 they released Multi-Tool Word for computers that ran a version of the UNIX operating system (OS).

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-2	Operating System
TOPIC	Open MS word and draw the table
LESSON PLAN CODE:	CA/I/11
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- Open MS Word
- Insert Table
- Delete Table
- Format Table
- Question & Answers
- Assessment



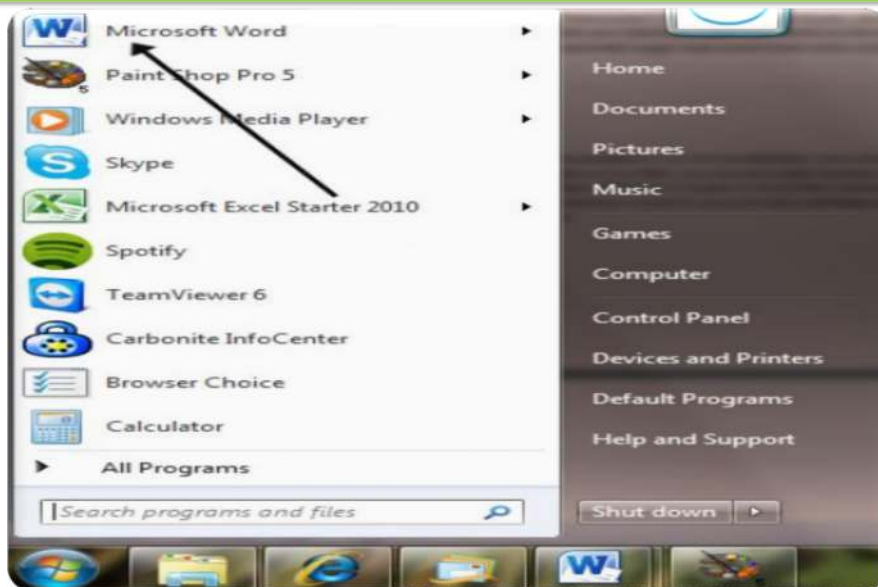
VOCABULARY

- Open
- MS Word
- Insert
- Table
- Delete
- Format

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OPEN MS WORD



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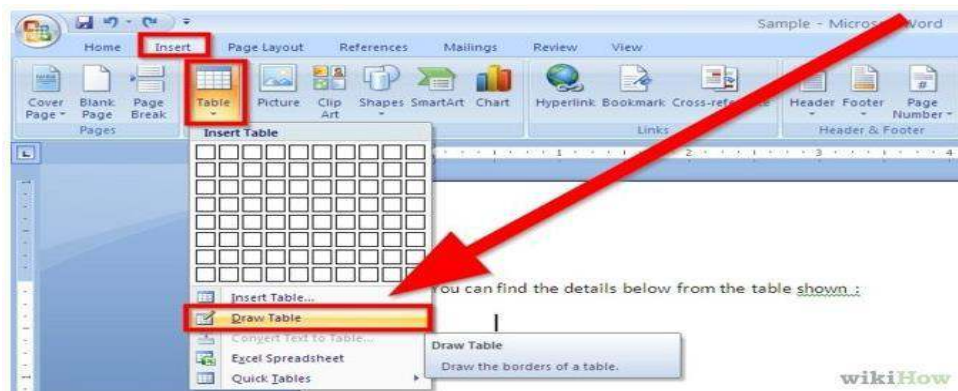
OPEN MS WORD AND DRAW THE TABLE

Name	Father's Name	Class	Address
Ali	Abid	10	H.299, E-145, Lahore
Syed	Usman	10	H.589, F-Block, Lahore.
Hammad	Hamza	10	H. 245, Ganga Ram, Lahore
Nouman	Sheraz	10	45-B/II, Lahore.

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HOW TO DRAW TABLE?



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CLOSE THE MS WORD



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Assessment

Draw the following table?

Name	Father's Name	Class	Address
Ali	Abid	10	H.299, E-145, Lahore
Syed	Usman	10	H.589, F-Block, Lahore.
Hammad	Hamza	10	H. 245, Ganga Ram, Lahore
Nouman	Sheraz	10	45-B/II, Lahore.

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ASSESSMENT

- By the end of this lesson students will be able to perform following.
- Open MS Word and draw the following table

Name	Father's Name	Class	Address
Ali	Abid	10	H.299, E-145, Lahore
Syed	Usman	10	H.589, F-Block, Lahore.
Hammad	Hamza	10	H. 245, Ganga Ram, Lahore
Nouman	Sheraz	10	45-B/II, Lahore.

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Thanx



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-3	Ms Word
TOPIC	Open MS word and insert the picture.
LESSON PLAN CODE:	CA/I/12
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Insert Picture
- Insert Bullets and Numbers
- Insert Clip Art
- Question & Answers
- Assessment

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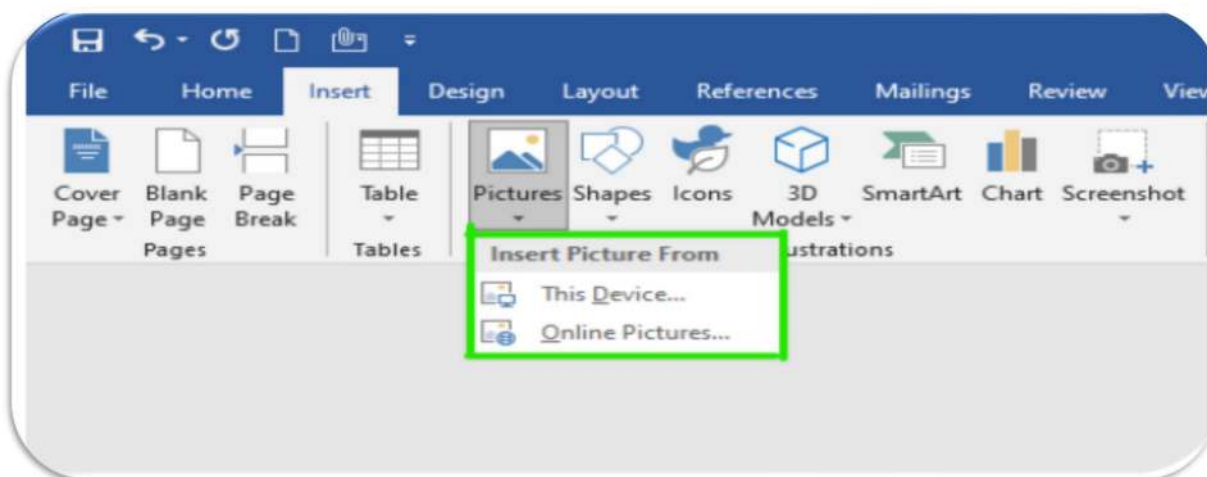
VOCABULARY

- Open
- MS Word
- Insert
- Picture
- Bullets
- Numbers
- Clip Art

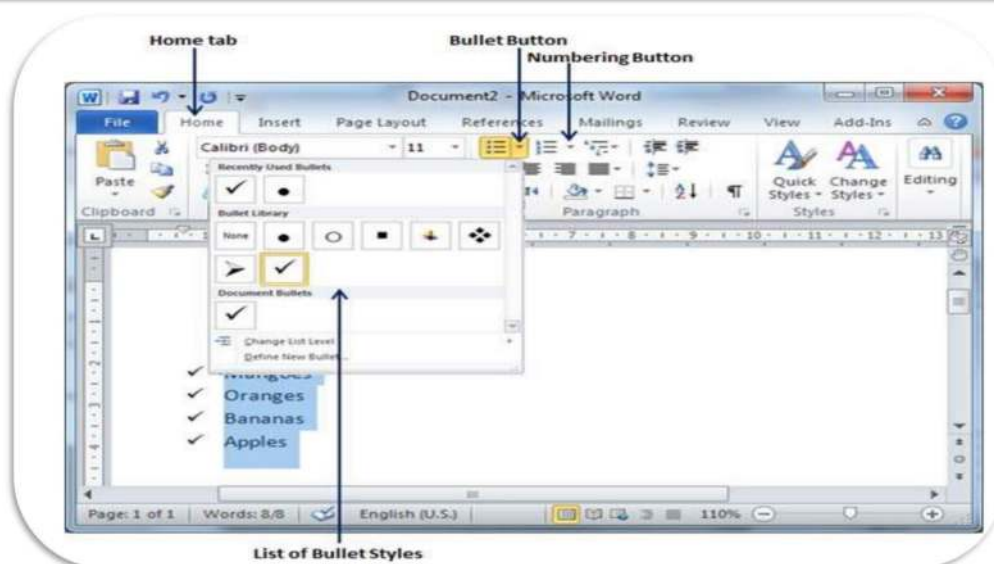
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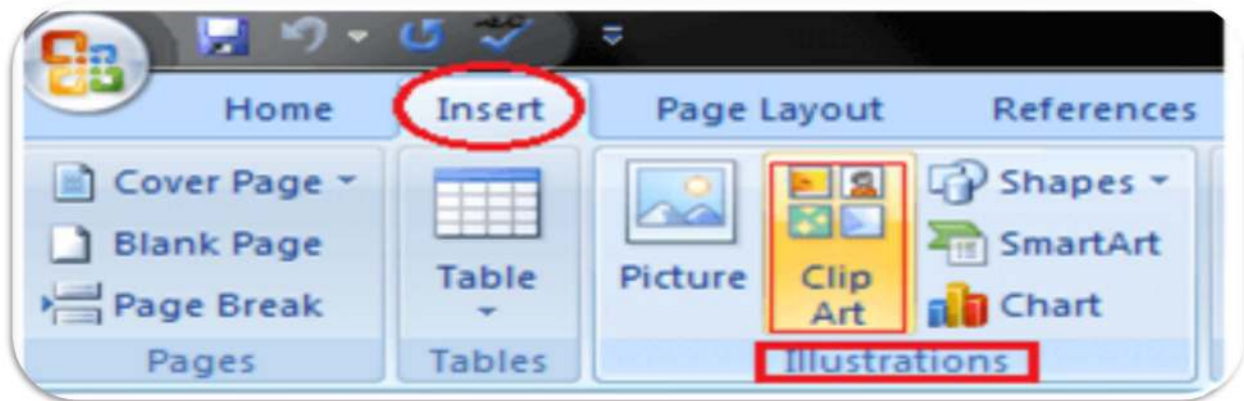
INSERT PICTURE



INSERT BULLETS AND NUMBERS



INSERT CLIP ART



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ASSESSMENT

- Teacher will ask students to describe the learnt words with the help of sign language, Insert bullet and number and insert the picture in MS Word.

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Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-3	Ms Word
TOPIC	Launch MS Power Point, insert a new slide & save
LESSON PLAN CODE:	CA/I/13
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- Open MS Power point
- Insert new slide
- Save Presentation
- Question & Answers
- Assessment



VOCABULARY

- MS Powerpoint
- Open
- Insert
- New
- Slide
- Presentation
- Save

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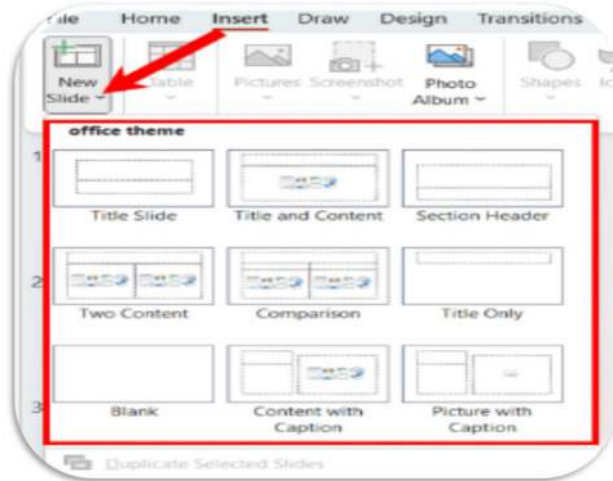
OPEN MS POWER POINT



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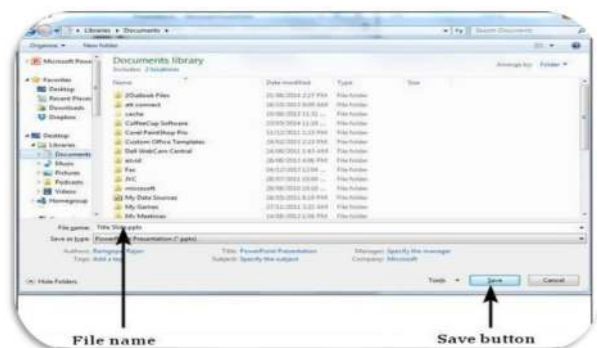
INSERT NEW SLIDE



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SAVE PRESENTATION



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ASSESSMENT

- Teacher will ask students to describe the learnt MS Power point with the help of sign language and insert new slide in MS Power point and save presentation.



Thanx



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-I	COMPUTER APPLICATIONS-I
CHAPTER-3	Ms Word
TOPIC	Launch MS Power Point, insert a table and insert a picture
LESSON PLAN CODE:	CA/I/14
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Vocabulary
- Open MS Power point
- Insert table
- Insert picture
- Question & Answers
- Assessment

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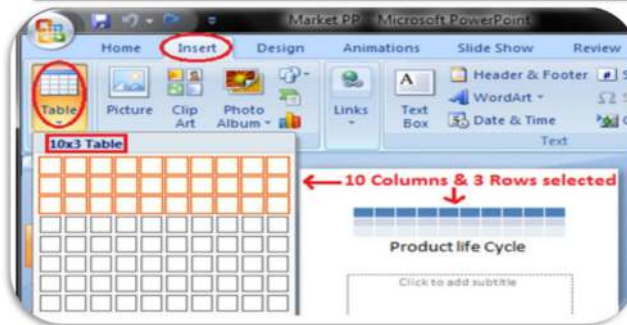
VOCABULARY

- MS Powerpoint
- Open
- Insert
- Table
- Picture

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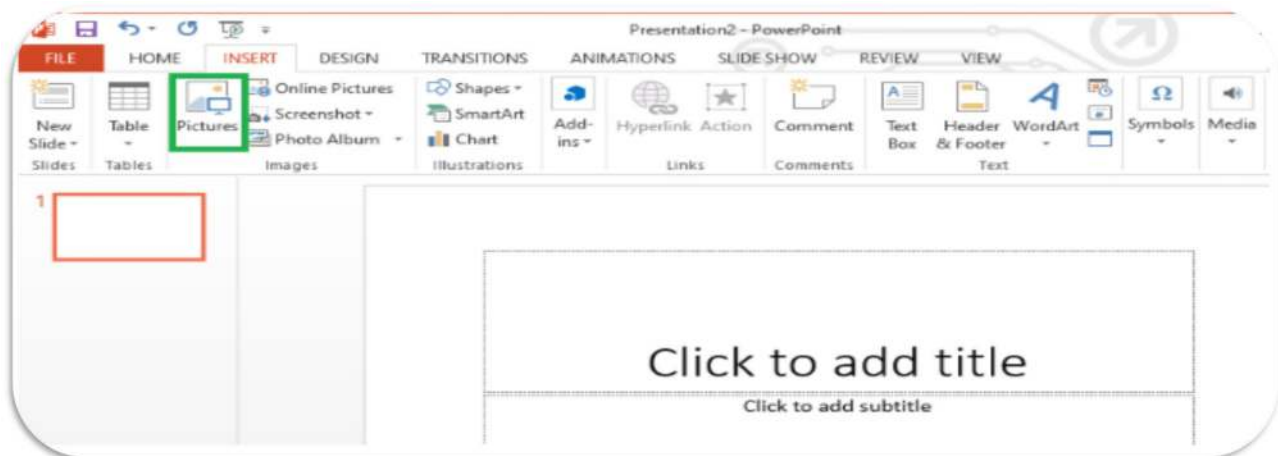
INSERT TABLE



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INSERT PICTURE



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ASSESSMENT

- Teacher will ask students to describe the learnt MS Power point with the help of sign language and Launch MS Power Point, insert a table and insert a picture in MS Power point.



Thanx



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	What is Internet?
LESSON PLAN CODE:	CA/II/1
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- *Vocabulary*
- *What is Internet?*
- *Question an Answers*
- *Assessment*

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WHAT IS INTERNET?

Vocabulary

- *Internet*
- *Vast*
- *Connects*
- *World*
- *Information*
- *Communication*
- *Anywhere*

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WHAT IS INTERNET?

The Internet is a vast network that connects computers all over the world. Through the Internet, people can share information and communicate from anywhere with an Internet connection.

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WHAT IS INTERNET?



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the definition of internet so that they could reproduce.



Thanx



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	What is Web Browser and How Does it Work?
LESSON PLAN CODE:	CA/II/2
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA





CONTENT

- Web Browser
- *Question an Answers*
- *Assessment*



Web Browser Working

- Enter URL

www.youtube.com

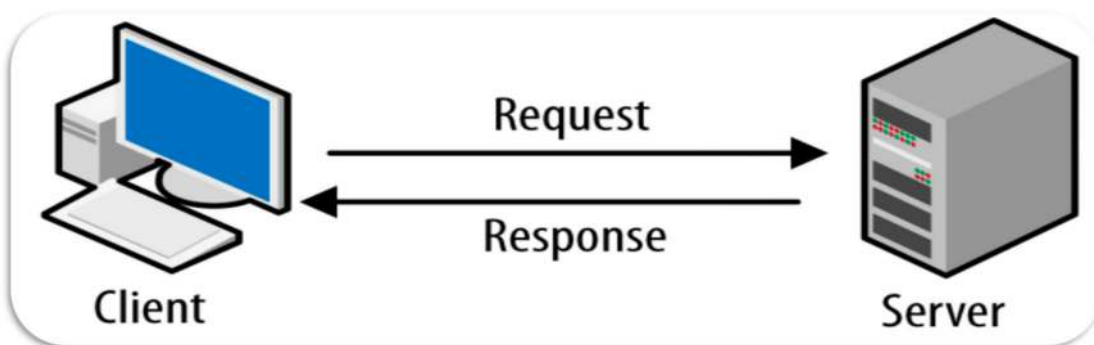


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Web Browser Working

- Locate and access



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Web Browser Working

- Display webpage



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ASSESSMENT

- Teacher will ask students to open any web browser and search and display a page of any site.

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Thanx 

Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	What are advantages/uses of Internet
LESSON PLAN CODE:	CA/II/3
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



CONTENT

- Advantages/uses of Internet
- *Question an Answers*
- *Assessment*

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Advantages

- Get Information



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Advantages

- Sell or buy things



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Advantages

- Entertainment



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ASSESSMENT

- Teacher will ask students to tell some other advantages of internet



Thanx



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	What are disadvantages Internet
LESSON PLAN CODE:	CA/II/4
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA





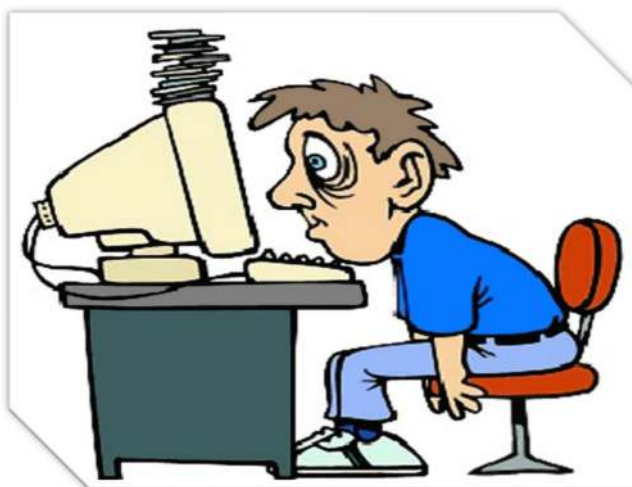
CONTENT

- Disadvantages of Internet
- *Question an Answers*
- *Assessment*



Disadvantages

- Health Problems



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Disadvantages

- Cyber Crime

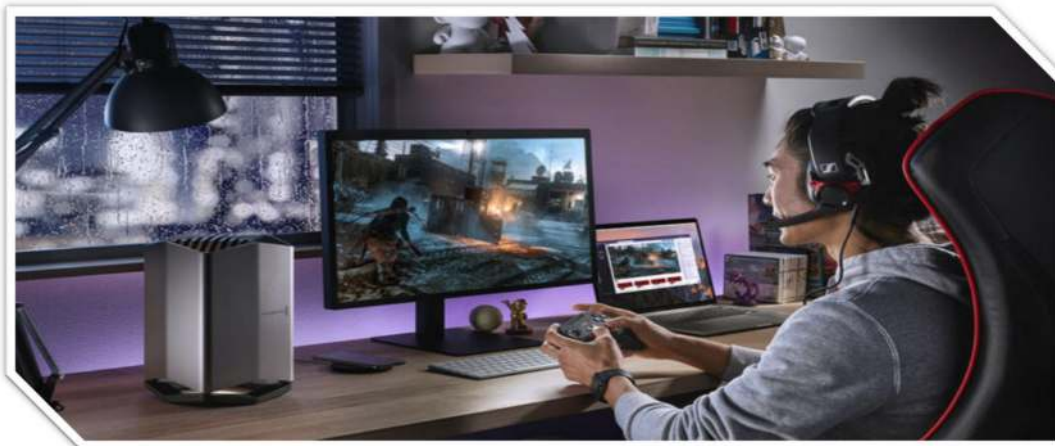


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Disadvantages

- Entertainment



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Disadvantages

- Virus & Threats



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Disadvantages

- Time Waste



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ASSESSMENT

- Teacher will ask students to tell some other disadvantages of internet

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Thanx 



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	Introduction to World Wide Web?
LESSON PLAN CODE:	CA/II/5
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- Vocabulary
- What is World wide web(www)?
- Question an Answers
- Assessment



WHAT IS WWW?

Vocabulary

- *WWW*
- *Interconnected*
- *Accessible*
- *Internet*
- *Public*

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WHAT IS WWW?

- World-Wide Web (also called WWW or W3) is a hypertext-based information system.
- The web is a system of interconnected public WebPages accessible through the internet.

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WHAT IS WWW?



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ASSESSMENT

- Students will describe the learnt words with the help of sign language
- Students will be asked to learn the definition of WWW so that they could reproduce.

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Thanx



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	ISP and its purpose
LESSON PLAN CODE:	CA/II/6
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- *Vocabulary*
- Define ISP and its purpose.?
- *Question an Answers*
- *Assessment*



Define ISP and its purpose.?

Vocabulary

- Internet/ISP.
- Dial-up.
- DSL, cable.
- Wireless.
- Fiber-optic.

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Define ISP and its purpose?

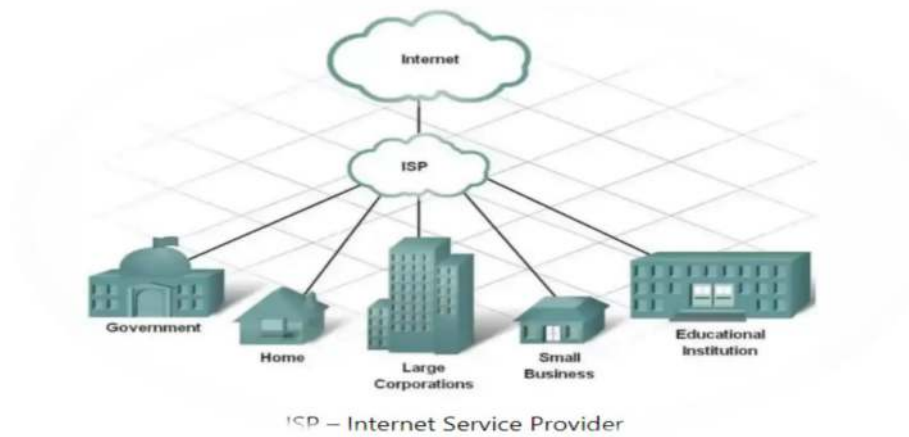
- An internet service provider (ISP) is a company that provides access to the internet. ISPs can provide this access through multiple means, including
- Dial-up.
- DSL, cable.
- Wireless.
- Fiber-optic.



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ISP and its purpose



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ASSESSMENT

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to explain ISP.

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-1	Internet
TOPIC	What is Search Engine?
LESSON PLAN CODE:	CA/II/7
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



1

CONTENT

- *Vocabulary*
- *What is Search Engine.?*
- *Question an Answers*
- *Assessment*



Search Engine

Vocabulary

- Search Engine.
- Coordinated.
- Database.
- Match.
- Specified criteria.

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What is Search Engine?

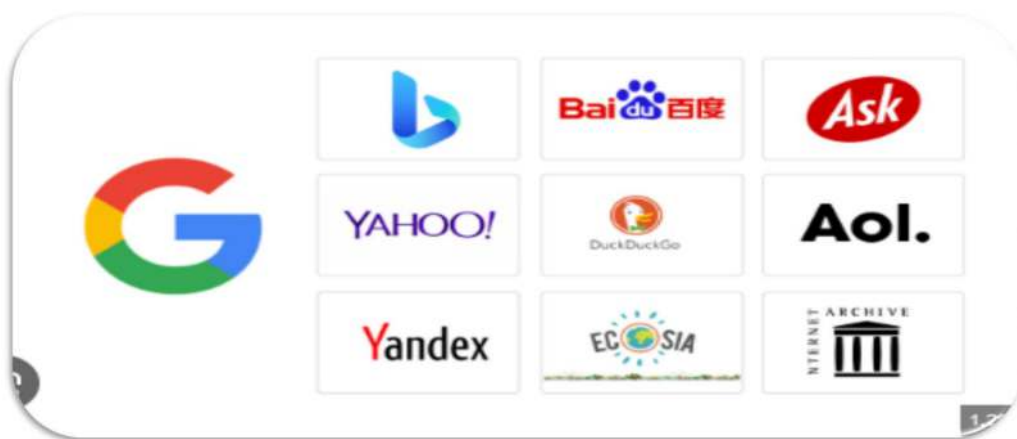
- A search engine is a coordinated set of programs that searches for and identifies items in a database that match specified criteria.



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Search Engine



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ASSESSMENT

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to explain search engine.

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Thanx 



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-2	Electronic Mail
TOPIC	Introduction of Electronic Mail
LESSON PLAN CODE:	CA/II/8
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



Contents

- Create Email Account
- Compose Email
- Send Email
- Download Attachments
- Q&A
- Assessment

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Create Email Account

- Open Gmail
- Fill signup form
- Set User Id
- Set Password
- Submit

A screenshot of the Gmail account creation form. It includes fields for Name (First Name: Elena, Last Name: Casarosa), Choose your username (EMCasarosa82, @gmail.com), Create a password (masked with dots), Confirm your password (masked with dots), and Birthday (Month: March, Day: 02, Year: 1982).

Name
First Name: Elena, Last Name: Casarosa

Choose your username
Username: EMCasarosa82, Domain: @gmail.com

Create a password
Password: [masked]

Confirm your password
Confirm Password: [masked]

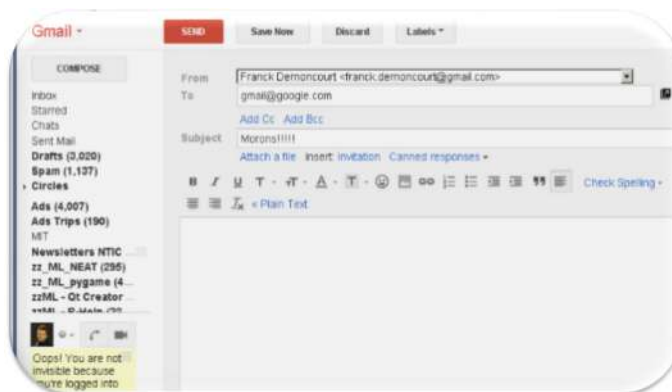
Birthday
Month: March, Day: 02, Year: 1982

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Compose Email

- Sign in Gmail Account
- Click Compose Button
- Type Contents
- Make attachment

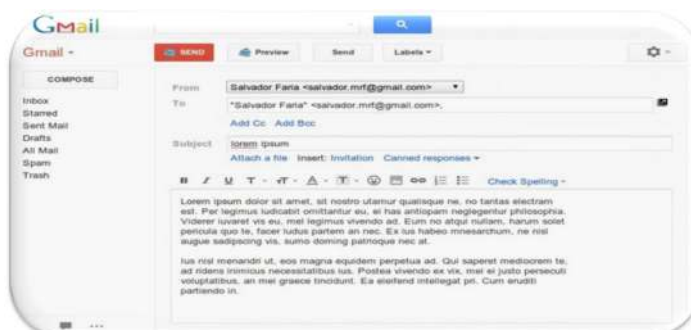


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Send Email

- Enter recipient email address
- Click on Send Email Button

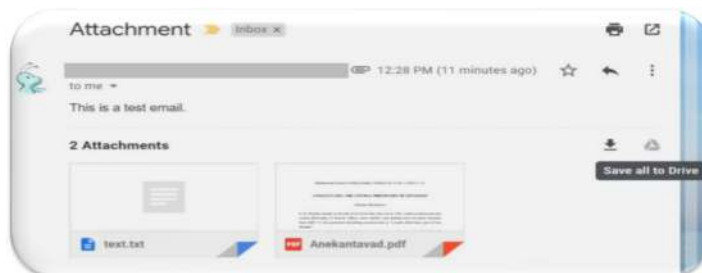


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Download Attachment

- Sign in Gmail Account
- Open inbox messages
- Open required email
- Download attachment



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Assessment

- Teacher will ask students to describe the learnt to create Email, send Email with attachment files with the help of sign language and perform the same on computer.

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-3	File and Folder Management
TOPIC	Managing Files and Folders
LESSON PLAN CODE:	CA/II/9
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



Contents

- Folder Management
- File Management
- Q&A
- Assessment

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Folder Management

- Create
- Rename
- Delete
- Restore

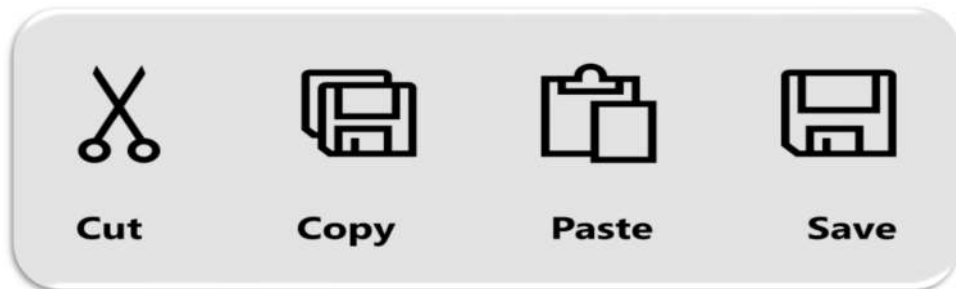


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File Management

- Create
- Rename
- Delete
- Restore
- Cut
- Copy
- Paste



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Assessment

- Teacher will ask students to describe the learnt to Create, File, Folder, Save, Rename, Delete, Restore, Recycle bin and Copy / Paste with the help of sign language and perform the same on computer.

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Thanx ✨ ✨ ✨ ✨ ✨



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-5	Urdu Word Processing
TOPIC	Introduction of Inpage
LESSON PLAN CODE:	CA/II/10
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



Contents

- Open Inpage
- Type Urdu paragraph
- Example
- Q&A
- Assessment

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Open Inpage

- Start Menu
- All Programs
- Inpgae



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Type Urdu paragraph

- 1۔ ان پیج کا تعارف
- 2۔ ان پیج کی بنیادی معلومات
- 3۔ پیج لے آؤٹ سیٹ کرنا
- 4۔ اردو کی بورڈ کی اقسام
- 5۔ اردو ٹائپنگ کے بنیادی اصول

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Assessment

- Students will type a paragraph of their choice in Inpage

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Thanx 



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-I	COMPUTER APPLICATIONS-II
CHAPTER-6	Microsoft Excel
TOPIC	Introduction of Microsoft Excel
LESSON PLAN CODE:	CA/II/11
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. MONA AJAZ
2. NAHEED AKHTAR
3. MUHAMMAD HAFEEZ
4. SYED TAHIR HUSSAIN
5. TAHER MEHMOOD
6. AWAIS ARSLAN
7. MUHAMMAD MUSTAFA



Contents

- Open excel
- Insert data in cells
- Sum the data using formula
- Q&A
- Assessment

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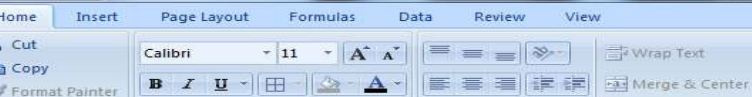


Open Excel



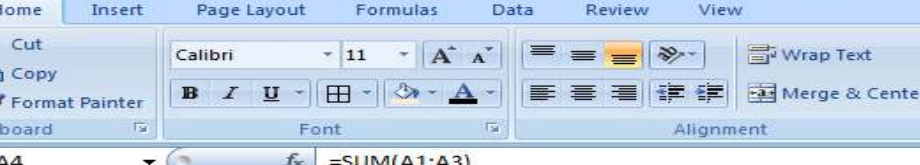
Government of the Punjab Special Education Department





The screenshot shows the Microsoft Excel interface with the 'Home' ribbon selected. The ribbon tabs include Home, Insert, Page Layout, Formulas, Data, Review, and View. The 'Font' group on the ribbon shows 'Calibri' font, size '11', and various formatting options like Bold, Italic, Underline, and text color. The 'Alignment' group shows options for text alignment and orientation. The 'General' group shows currency and percentage symbols. The active cell is A1, which contains the value '55'. Below the ribbon, a table is visible with columns A, B, C, and D, and rows 1, 2, and 3. The table data is as follows:

	A	B	C	D
1	55	67	76	65
2	75	45	34	45
3	34	55	67	78



The screenshot shows the Microsoft Excel interface. The ribbon at the top includes tabs for Home, Insert, Page Layout, Formulas, Data, Review, and View. The Home tab is active, displaying groups for Clipboard, Font, and Alignment. The formula bar shows the active cell A4 containing the formula `=SUM(A1:A3)`. The spreadsheet data is as follows:

	A	B	C	D
1	55	67	76	65
2	75	45	34	45
3	34	55	67	78
4	164	167	177	188





ASSESSMENT

- Students will enter data of their choice and sum it



Thanx



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	What are Digital Devices?
LESSON PLAN CODE:	CHN/I/1
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL



EVERY DAY IS A CHANCE
TO GET BETTER, DON'T WASTE IT.

WHAT ARE DIGITAL DEVICES?



Lesson No. CHN//I

Special Education Department



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|----------------|-------------------|
| ■ Operate | ■ Transmit |
| ■ Digital data | ■ Mobile Phone |
| ■ Signals | ■ Televisions |
| ■ Device | ■ Digital Watches |
| ■ Process | |
| ■ Store | |

Special Education Department



DEFINITION

- Digital devices operate by using digital data or signals.
- These devices process, store and transmit data in digital form i.e. 0 or 1.
- Examples: Computers, Mobile Phones, Televisions, Digital Watches

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the signs of

- Device
- Process
- Store
- Transmit

Special Education Department



HOME TASK

- Write the class work “ Digital Devices ”on your notebook



Special Education Department



Thank You!



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	What is Modem?
LESSON PLAN CODE:	CHN/I/2
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





WHAT IS MODEM?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- Modem
- Modulator/De-Modulator
- Convert
- Digital data
- Analogue signals
- Essential
- Internet communications

Special Education Department



DEFINITION

- Modem stands for Modulator/De-Modulator
- It converts digital data to analogue signals and analogue signals to digital data
- Modem is essential for Internet communications

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the signs of

- Modem
- Modulator/De-Modulator
- Convert
- Digital data

Special Education Department



HOME TASK

- Write the class work “What is Modem?” on your notebook



Special Education Department



Thank You!



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	What is Router?
LESSON PLAN CODE:	CHN/I/3
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





WHAT IS ROUTER?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- Networking device
- Data packets
- Network
- Technique
- Send
- Delivery
- Best Route

Special Education Department



DEFINITION

- It is a networking device
- Its forward data packets between computer and network
- It uses techniques to send data over best route
- It ensures delivery of data packets

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the signs of

- Networking device
- Data packets
- Network
- Technique

Special Education Department



HOME TASK

- Write the class work “What is router?” on your notebook



Special Education Department



Thank You!



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	Differentiate between Hub and Switch?
LESSON PLAN CODE:	CHN/I/4
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





DIFFERENTIATE BETWEEN HUB AND SWITCH?



CONTENT

- Key Words
- Difference
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|------------------------|---------|
| ■ Simple | ■ Small |
| ■ Intelligent | ■ Large |
| ■ Communication device | |
| ■ Broadcast | |
| ■ Unicast | |
| ■ Expensive | |
| ■ Inexpensive | |

Special Education Department



DIFFERENCE

Hub	Switch
•Simple communication device	•Intelligent communication device
•It broadcast the data	•It unicast the data
•Inexpensive	•Expensive
•Use In small networks	•Use in large networks

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the signs of

- Broadcast
- Unicast
- Expensive
- Inexpensive
- Small
- Large

Special Education Department



HOME TASK

- Write the class work “**Differentiate between Hub and Switch**” on your notebook



Special Education Department



Thank You!



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	What is Network Card?
LESSON PLAN CODE:	CHN/I/5
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





WHAT IS NETWORK CARD?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- **Electronic**
- **Device**
- **Connect**
- **Plugged**
- **Mother board**
- **Computer Network**
- **LAN**

Special Education Department



DEFINITION

- It is an electronic device that connects a computer to a computer network, usually a LAN.
- It is also called NIC.
- It is directly plugged into computer's motherboard.

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Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- **Electronic**
- **Connect**
- **Mother board**
- **Computer Network**

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HOME TASK

- Write the definition of Network Card on your notebook



Special Education Department



THANK YOU

Special Education Department



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-1	Digital Devices
TOPIC	What are the usages of Graphic Card?
LESSON PLAN CODE:	CHN/I/6
VERSION:	01(26 TH APRIL, 2024)

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6. MUDASSIR YOUNIS
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WHAT IS THE USAGE OF GRAPHICS CARD?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- Improve
- Graphics
- Videos
- Images
- Games
- 2D & 3D

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WHAT IS THE USAGE OF GRAPHICS CARD?

- It improves the computer graphics.
- It improves the quality of videos, images and games.
- It is use for 2D and 3D images.

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- Improve
- Graphics
- Videos
- Images
- Games
- 2D & 3D

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HOME TASK

- Write the usage of Graphics Card on your notebook



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THANK YOU

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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	Differentiate between System Unit and CPU?
LESSON PLAN CODE:	CHN/I/7
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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WHAT IS THE DIFFERENCE BETWEEN CPU AND SYSTEM UNIT ?



CPU



SYSTEM UNIT



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- **Case**
- **Brain**
- **Electronic**
- **Component**
- **System unit**
- **CPU**

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WHAT IS THE DIFFERENCE BETWEEN CPU AND SYSTEM UNIT ?

System Unit	CPU
It is a case	It is also called brain of computer
It contains electronic components of computer	It is an electronic component

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- Case
- Brain
- Electronic
- Component
- System unit
- CPU

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HOME TASK

- Write the difference between CPU and System Unit on your notebook



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THANK YOU

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In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What are the function of System Unit?
LESSON PLAN CODE:	CHN/I/8
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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WHAT ARE THE FUNCTIONS OF SYSTEM UNIT ?



Lesson No. CHN//8

Special Education Department



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- System unit
- Function
- Holds
- Component
- Power supply
- Protects
- Sensitive
- Electronic

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WHAT ARE THE FUNCTIONS OF SYSTEM UNIT ?

- It holds other components of computer.
- It protects sensitive electronic components of computer.
- It provides basic power supply unit.

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Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- System unit
- Function
- Holds
- Power supply
- Protects
- Electronic

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HOME TASK

- Write the Functions of System Unit on your notebook



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What is Motherboard?
LESSON PLAN CODE:	CHN/I/9
VERSION:	01(26 TH APRIL, 2024)

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WHAT IS MOTHERBOARD?



Lesson No. CHN//9

Special Education Department



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|-------------------------------|-----------------|
| ■ Printed circuit board (PCB) | ■ Graphics card |
| ■ Connect | ■ Hardware |
| ■ Internal | ■ Power |
| ■ Components | ■ communicate |
| ■ Memory | |
| ■ Processor | |

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WHAT IS MOTHER BOARD?

- It is the main printed circuit board of computer.
- It connects all of the internal components, e.g. memory, processor, graphics card and other hardware.
- It also provides power to each component and allows them to communicate.

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Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- Printed circuit board (PCB)
- Connect
- Components
- Memory
- Processor
- communicate

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HOME TASK

- Write a note on Motherboard on your notebook



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THANK YOU

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In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	Differentiate between RAM and ROM.
LESSON PLAN CODE:	CHN/I/10
VERSION:	01(26 TH APRIL, 2024)

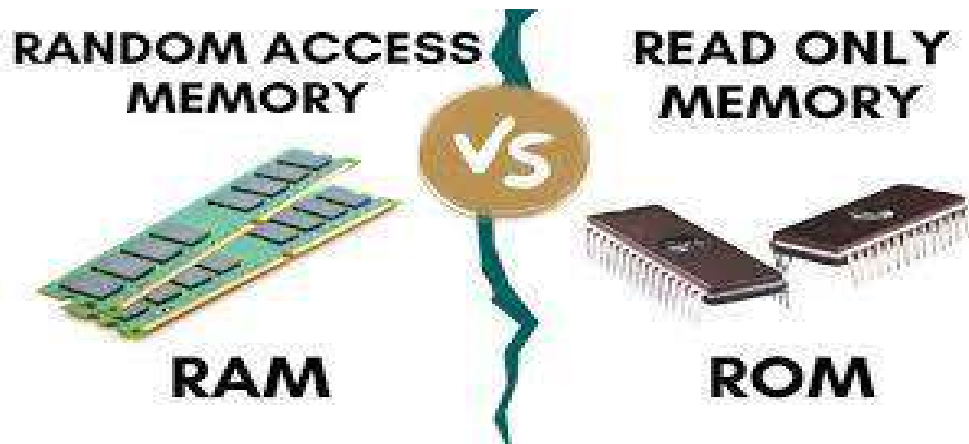
TEAM MEMBERS

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WHAT IS DIFFERENCE BETWEEN RAM AND ROM?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|----------------------|-------------------------|
| ■ RAM and ROM | ■ Read and Write |
| ■ Volatile | ■ Data |
| ■ Storage | ■ Memory |
| ■ Temporary | ■ Delete/ change |
| ■ Permanent | |

Special Education Department



WHAT IS THE DIFFERENCE BETWEEN RAM AND ROM?

RAM	ROM
RAM stands for Random Access Memory	ROM stands for Read Only Memory
It is volatile memory.	It is non-volatile memory.
RAM is a temporary Storage	ROM is a permanent storage
We can read write data in RAM	We can only read this memory and cannot write through it
The data in the RAM can be changed or deleted	The instructions written in ROM cannot be changed or deleted

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Q / A



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ASSESSMENT / EVALUATION

What are the sign of

- **RAM and ROM**
- **Storage**
- **Temporary**
- **Permanent**
- **Read and Write**
- **Memory**

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HOME TASK

- Write the difference between RAM and ROM on your notebook



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THANK YOU

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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What is Hard Disk Drive?
LESSON PLAN CODE:	CHN/I/11
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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WHAT IS HARD DISK DRIVE?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|--------------------|---------------------------|
| ■ Hard disk | ■ non volatile |
| ■ Magnetic | ■ memory |
| ■ Storage | ■ storage capacity |
| ■ device | |
| ■ plates | |

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WHAT IS HARD DISK DRIVE?

- It is a magnetic storage device.
- It consists of metal plates and controller circuit.
- The data is stored on both sides of plates.it is non-volatile memory.
- It has large storage capacity.

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Q / A



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ASSESSMENT / EVALUATION

What are the sign of

- **Hard disk**
- **Magnetic**
- **plates**
- **non volatile**
- **memory**
- **storage capacity**

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HOME TASK

- Write a note on Hard Disk Drive on your notebook



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In-Service Training Program for Capacity Building



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What is the function of Power Supply?
LESSON PLAN CODE:	CHN/I/12
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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WHAT IS THE FUNCTION OF POWER SUPPLY?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|--------------------------|-----------------------|
| ■ Power Supply | ■ distribute |
| ■ Hardware device | ■ Power cable |
| ■ Coverts | ■ Plugged |
| ■ Electricity | ■ Power switch |
| ■ AC | |
| ■ DC | |

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WHAT IS THE FUNCTION OF POWER SUPPLY?

- It is a hardware device that converts AC electricity into DC electricity and then distributes it to all components of the computer.
- The power cable is plugged into it.
- It has an I/O power switch on it.

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Q / A



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ASSESSMENT / EVALUATION

What are the sign of

- **Power Supply**
- **Hardware device**
- **Coverts**
- **Electricity**
- **AC**
- **DC**
- **Power cable**
- **Plugged**

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HOME TASK

- Write a note on functions of power supply on your notebook



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THANK YOU

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In-Service Training Program for Capacity Building



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What is Processor?
LESSON PLAN CODE:	CHN/I/13
VERSION:	01(26 TH APRIL, 2024)

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WHAT IS PROCESSOR?



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- | | |
|--------------------|------------------------------------|
| ■ Brain | ■ Speed of computer |
| ■ Processes | ■ Arithmetic and Logic Unit |
| ■ Input | ■ Control Unit |
| ■ Output | |
| ■ Controls | |

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WHAT IS PROCESSOR?

- It is the brain of computer. It processes input into output and controls the speed of computer. It consists of two units.
- Arithmetic and logic unit (ALU)
- Control unit (CU)

Special Education Department



Q / A



Special Education Department



ASSESSMENT / EVALUATION

What are the sign of

- **Brain**
- **Processes**
- **Input**
- **Output**
- **Controls**
- **Speed of computer**
- **Arithmetic and Logic Unit**
- **Control Unit**

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HOME TASK

- Write a short note on processor on your notebook



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-2	Inside the System Unit
TOPIC	What is Port? Name its type.
LESSON PLAN CODE:	CHN/I/14
VERSION:	01(26 TH APRIL, 2024)

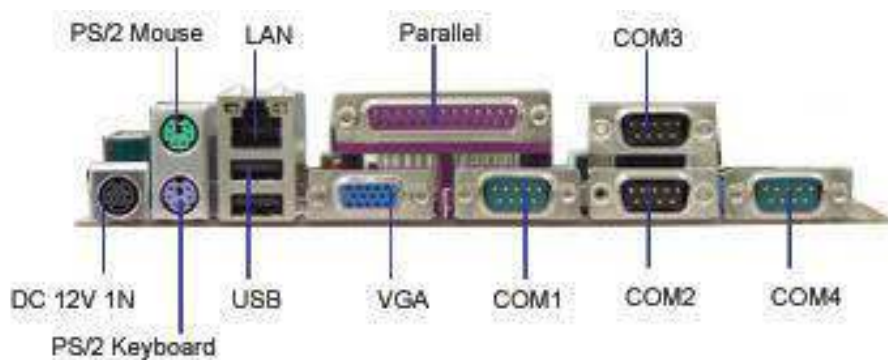
TEAM MEMBERS

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WHAT IS PORT? NAME ITS TYPES



CONTENT

- Key Words
- Definitions
- Q/A
- Assessment/Evaluation
- Home Task

Special Education Department



KEY WORDS

- **Port**
- **Physical point**
- **external device**
- **connected**
- **serial port**
- **parallel port**
- **USB port**

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WHAT IS PORT? NAME ITS TYPES

Port is a Physical point provided on computer using which an external device can be connected to the computer.
There are three main types of ports.

- Serial Port
- Parallel Port
- USB Port

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Q / A



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ASSESSMENT / EVALUATION

What are the sign of

- **Port**
- **Physical point**
- **external device**
- **connected**
- **serial port**
- **parallel port**
- **USB port**

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HOME TASK

- Write what is Port? Name its Types on your notebook



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In-Service Training Program for Capacity Building



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARDWARE AND NETWORK-I
CHAPTER-3	Assembling and De-Assembling
TOPIC	Assembling and De-Assembling of Processor
LESSON PLAN CODE:	CHN/I/15
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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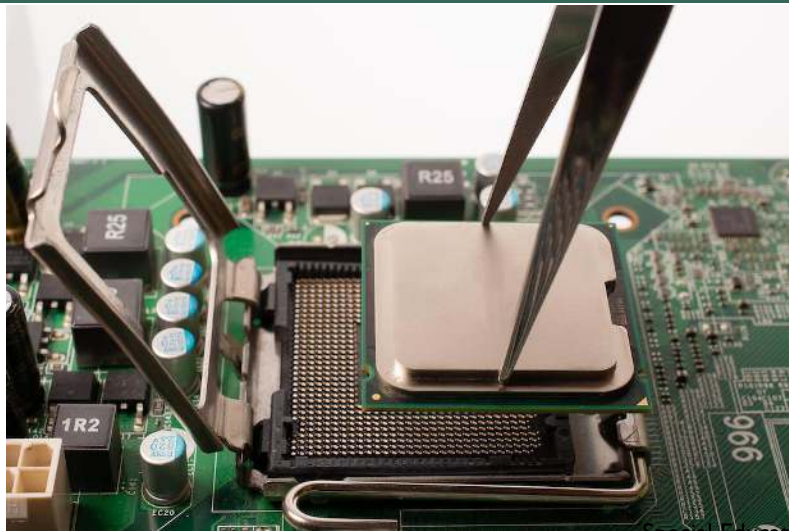
CONTENT

- **Key Words**
- **Assembling of PROCESSOR**
- **De-Assembling of PROCESSOR**
- **Q/A**
- **Assessment**
- **Home Task**

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ASSEMBLING AND DE-ASSEMBLING OF PROCESSOR



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KEY WORDS

- Processor
- Unplug
- Insert
- Fix
- Push down
- Fan
- Heat sink
- Power Cable
- Cover
- System unit

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ASSEMBLING OF PROCESSOR

1. Insert the Processor in the slot.
2. Lock the clip.
3. Fix the Heat sink and Fan.
4. Place the cover of system unit
5. Screw the bolts

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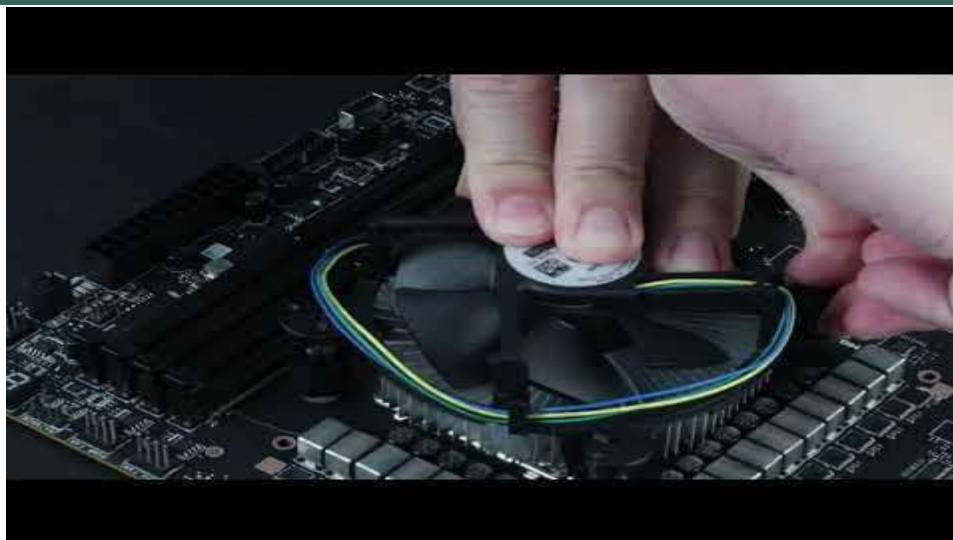
DE-ASSEMBLING OF PROCESSOR

1. Unplug the power cable from computer
2. Un-screw the bolts of System unit
3. Take the side cover off
4. Remove Fan and heat sink.
5. Push the Unlock Clips down.
6. Remove the Processor from slot.

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ASSEMBLE AND DISASSEMBLE OF PROCESSOR



Q / A



Special Education Department



ASSESSMENT

What are the sign of:

- **Un-Plug**
- **Insert**
- **Fix**
- **Push down**
- **Fan**
- **Heat sink**
- **Power Cable**
- **Cover**
- **System unit**
- **bolts**

HOME TASK

Write down the steps to Assemble and Disassemble of the Processor in your Practical Notebook.



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARWARE AND NETWORK-I
CHAPTER-3	Assembling and De-Assembling
TOPIC	Assembling and De-Assembling of CD/DVD ROM
LESSON PLAN CODE:	CHN/I/16
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENT

- **Key Words**
- **De-Assemble of CD/DVD ROM**
- **Assemble of CD/DVD ROM**
- **Q/A**
- **Assessment**
- **Home Task**

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ASSEMBLE AND DE-ASSEMBLE OF CD/DVD ROM



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KEY WORDS

- **DVD ROM Drive**
- **Assembling / De-Assembling**
- **Un-Plug /Plug**
- **Power Cable**
- **Cover**
- **System unit**
- **Push out**
- **Screw / bolts**

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ASSEMBLING OF CD/DVD ROM:

1. Insert the **DVD ROM** in system unit
2. Tight the screws
3. Plug-in the power and data cables of **DVD ROM**
4. Place the cover of system unit
5. Screw the bolts of **System Unit**

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ASSEMBLING OF DVD ROM:



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DE-ASSEMBLING OF DVD ROM:

1. **Unplug the power cable from computer**
2. **Un-screw the bolts of System unit**
3. **Take the side cover off**
4. **Unplug the power and data cables of CD/DVD ROM**
5. **Un-screw the bolts of CD/DVD ROM**
6. **Push the CD/DVD ROM out of the system unit**

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HOME TASK

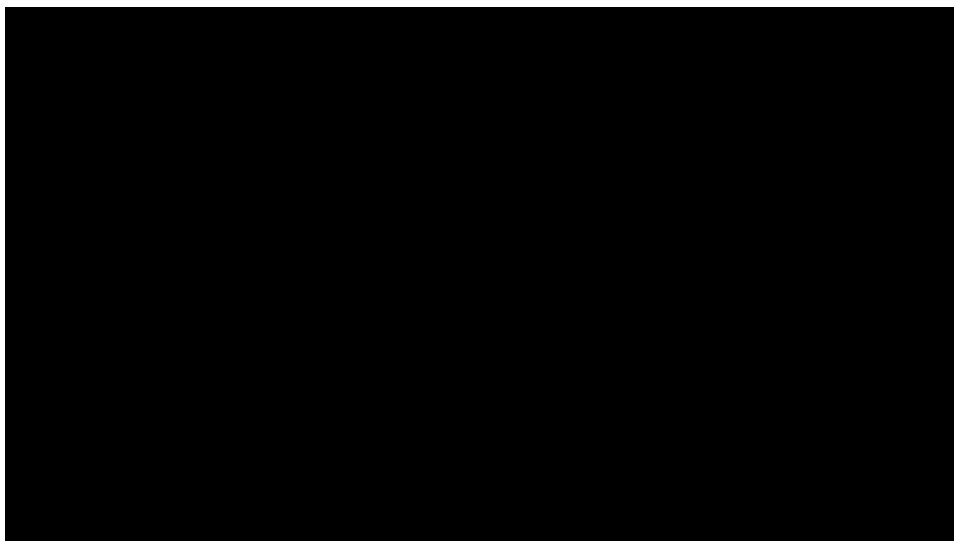
- Write down the steps to Assembling and De-Assembling the CD/DVD ROM in your Practical Notebook.



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DE-ASSEMBLING OF DVD ROM:



Q / A



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ASSESSMENT

What are the sign of:

- **Un-Plug /Plug**
- **Power Cable**
- **Cover**
- **System unit**
- **Push out**
- **Screw / bolts**

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In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARWARE AND NETWORK-I
CHAPTER-4	Software Installation & Un-Installation
TOPIC	Operating System Installation (Windows)
LESSON PLAN CODE:	CHN/1/17
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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1

CONTENT

- Key Words
- Installation of MS-Windows 10
- Q/A
- Assessment
- Home Task

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INSTALLATION OF MS-WINDOWS 10



KEY WORDS

- **Insert**
- **Boot**
- **MS Windows 10**
- **CD/DVD**
- **Product Key**
- **On Screen**
- **Select**
- **Install / Installation**
- **Remove**



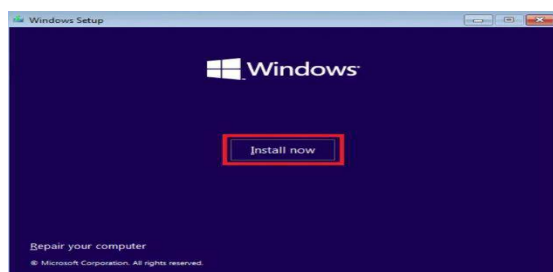
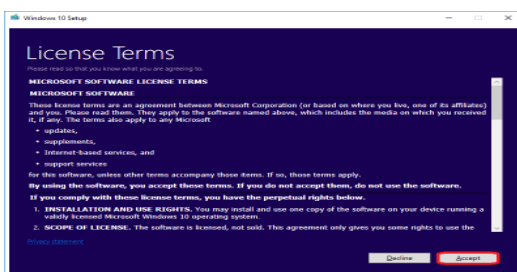
STEPS FOR INSTALLATION OF MS-WINDOWS 10

1. Insert MS-Windows 10 CD/DVD
2. Boot from CD/ DVD.
3. Click Next.
4. Enter your Product Key & Click Next.
5. Select type of Installation what you want.
6. Click Install Now.
7. Follow the On Screen instructions to Install MS-Windows 10.
8. Remove the CD/DVD after completion.

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INSTALLATION OF MS-WINDOWS 10.



Q / A



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ASSESSMENT

What are signs of following Key words:

- Insert
- Boot
- MS Windows 10
- CD/DVD
- Product Key
- On Screen
- Select
- Install / Installation
- Remove

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HOME TASK

Write down the steps to Install MS-Windows 10 in your Practical Notebook.



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-9

MODULE-II	COMPUTER HARWARE AND NETWORK-I
CHAPTER-4	Software Installation & Un-Installation
TOPIC	Install Application Software
LESSON PLAN CODE:	CHN/1/18
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENT

- **Key Words**
- **Installation of MS-Office**
- **Q/A**
- **Assessment**
- **Home Task**

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INSTALLATION OF MS-OFFICE



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KEY WORDS

- **Insert**
- **MS Office**
- **CD/DVD**
- **Product Key**
- **License Terms**
- **Accept**
- **Install / Installation**
- **Remove**

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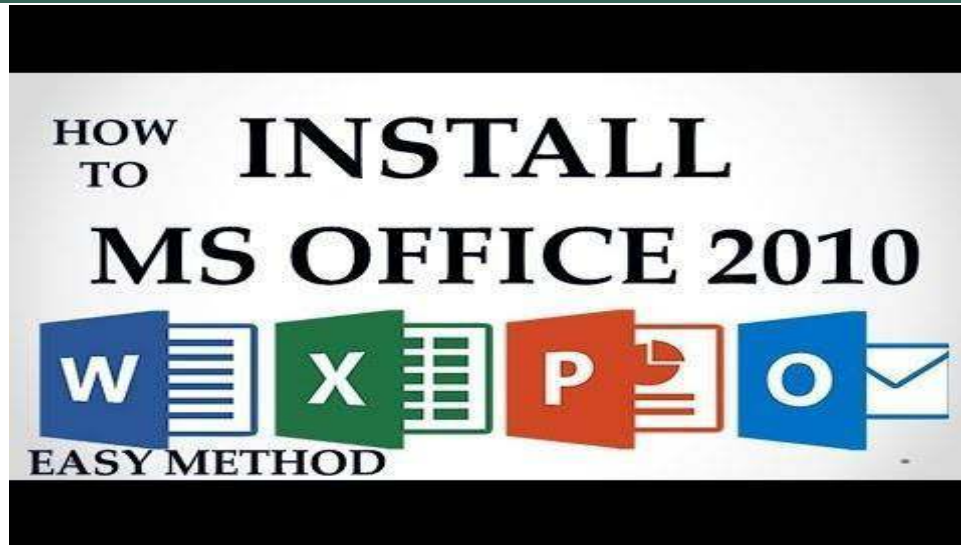
STEPS FOR INSTALLATION OF MS-OFFICE

- **Insert MS Office CD/DVD**
- **Enter the Product Key.**
- **Read and Accept the MS Software License terms.**
- **Click Continue.**
- **Wait for installation to complete.**
- **Remove MS-Office CD/DVD after completion.**

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INSTALLATION OF MS-OFFICE.



Q / A



ASSESSMENT

What are signs of following Key words:

- Insert
- MS Office
- CD/DVD
- Product Key
- License Terms
- Accept
- Install / Installation
- Remove

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HOME TASK

Write down the steps to Install MS-Office in your Practical Notebook.



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Type
TOPIC	What is Network? Name its type.
LESSON PLAN CODE:	CHN/II/1
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENTS

- **Keywords**
- **What is network?**
- **Types of network**
- **LAN**
- **MAN**
- **WAN**
- **Q&A**
- **Assessment**

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KEY WORDS

- **Network**
- **Share**
- **Resources**
- **Types**
- **LAN**
- **MAN**
- **WAN**

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DEFINITION

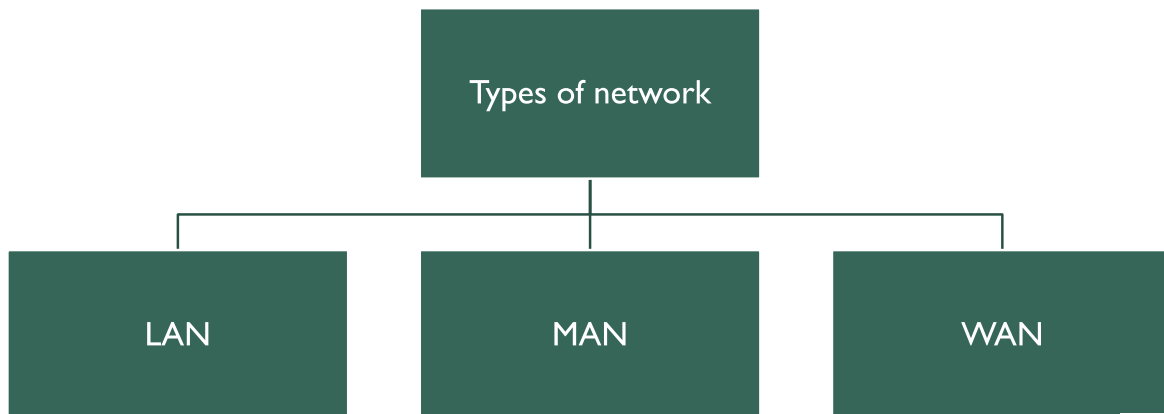
When two or more computers, share their resources, it is called computer network



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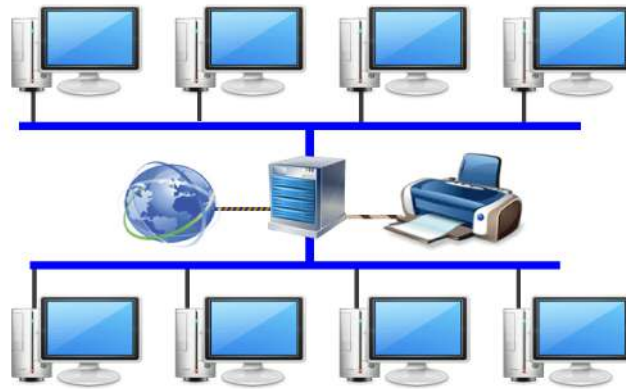
TYPES OF COMPUTER NETWORK



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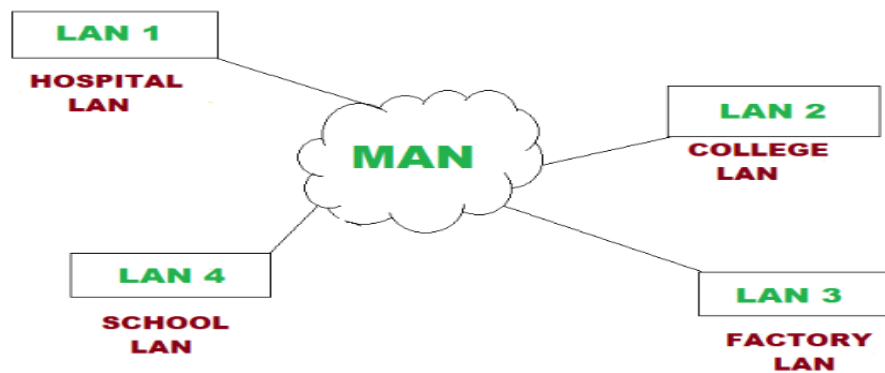
LAN



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MAN



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WAN



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Q/A



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ASSESSMENT

What are the sign of

- **Resources**
- **Types**
- **Share**
- **Network**

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HOME TASK

Write answer of the question “What is network? Write its types” on your notebook



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Thankyou



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Type
TOPIC	What is LAN?
LESSON PLAN CODE:	CHN/II/2
VISION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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2. MUHAMMAD MURSALEEN
3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





CONTENTS

- **Keywords**
- **Definition of LAN?**
- **Q&A**
- **Assessment**



KEY WORDS

- **Network**
- **LAN**
- **Geographical**
- **Local**
- **Area**
- **Building**
- **Stands for**

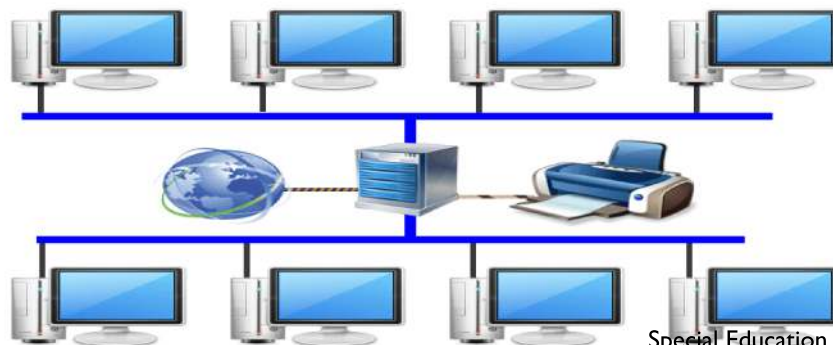
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DEFINITION OF LAN

LAN stands for Local Area Network

It is a small geographical network, within a building.



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Q / A



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ASSESSMENT

What are the sign of

- Geographical
- Building
- Stands for
- Network

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HOME TASK

Write the definition of LAN on your notebook



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Thank you



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Type
TOPIC	What is MAN?
LESSON PLAN CODE:	CHN/II/3
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
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3. ALI HASSAN
4. NAZMEEN AFZAL
5. SHAHIDA TUFAIL
6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL



CONTENTS

- **Keywords**
- **Definition of MAN?**
- **Q&A**
- **Assessment**

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KEY WORDS

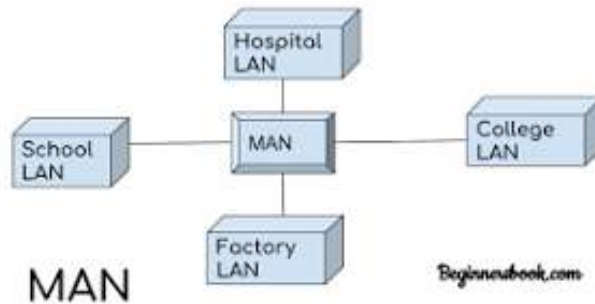
- **Network**
- **MAN**
- **Geographical**
- **Metropolitan**
- **Area**
- **city**
- **Stands for**

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DEFINITION OF MAN

MAN stands for Metropolitan Area Network
It is small geographical network within a city.



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Q / A



ASSESSMENT

What are the signs of

- **Geographical**
- **City**
- **Stands for**
- **Network**

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HOME TASK

Write the definition of MAN on your notebook



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Thank you



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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Type
TOPIC	What is WAN?
LESSON PLAN CODE:	CHN/II/4
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. ASMA SHIRAZ
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CONTENTS

- **Keywords**
- **Definition of WAN?**
- **Q&A**
- **Assessment**



KEY WORDS

- **Geographical**
- **Network**
- **World**
- **Area**
- **Stands for**
- **Wide**
- **WAN**

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DEFINITION OF WAN

WAN stands for Wide Area Network

WAN is a larger geographical network. It covers whole world.

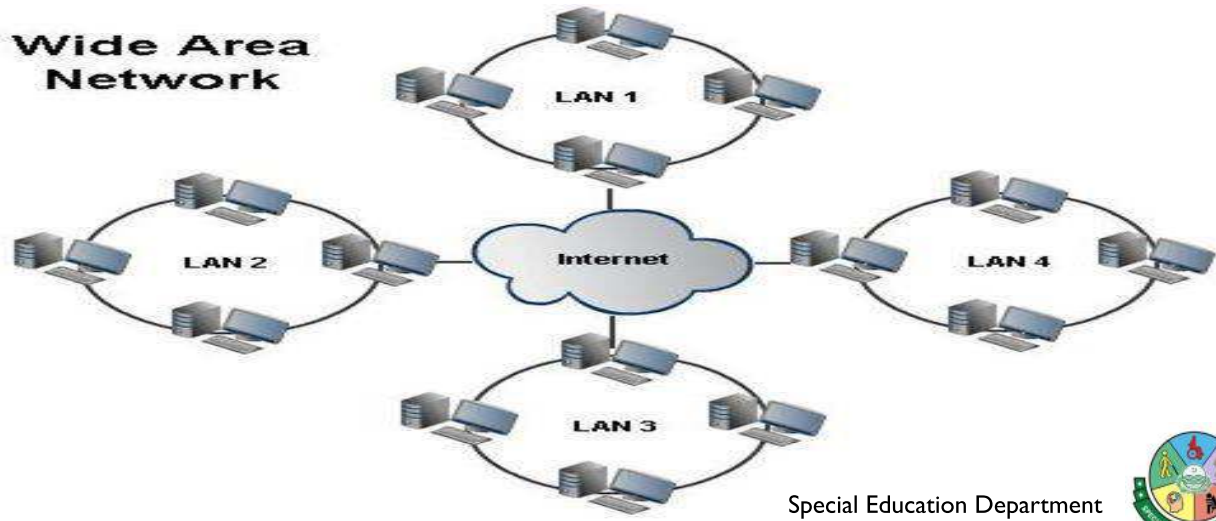
Example : Internet



Wan Netwo
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WAN



ASSESSMENT

What are the sign of

- **Geographical**
- **Building**
- **Stands for**
- **Network**
- **Wide**

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Q / A



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HOME TASK

- Write the definition of WAN on your notebook



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Thank you



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Type
TOPIC	What is Server and Client?
LESSON PLAN CODE:	CHN/II/5
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENTS

- **Keywords**
- **Definition of Server?**
- **Definition of Client?**
- **Q&A**
- **Assessment**



KEY WORDS

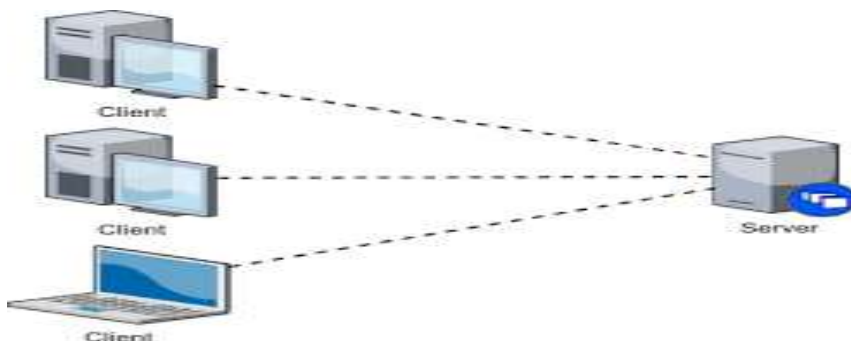
- **Server**
- **Client**
- **Provide**
- **Services**
- **Asking for**
- **Network**

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DEFINITION OF SERVER

The computer providing services in a network is called a server.

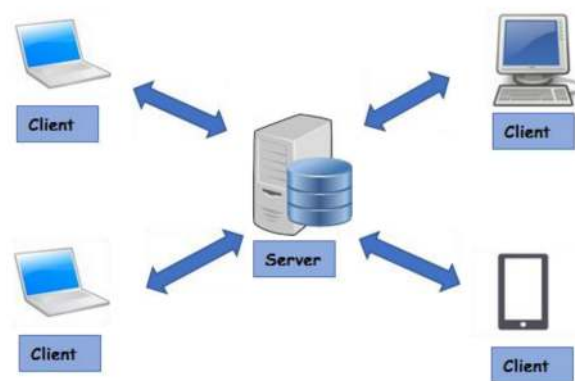


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DEFINITION OF CLIENT

The computer asking for service in a network is called a client



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Q / A



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ASSESSMENT

What are the sign of

- **Server**
- **Client**
- **Providing**
- **Services**
- **Asking for**

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HOME TASK

- Write the definition of Server and Client on your notebook



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Thank you



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-2	Peripheral Devices
TOPIC	Differentiate between Input and Output devices.
LESSON PLAN CODE:	CHN/II/6
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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7. M. FARRUKH JAMEEL





CONTENTS

- **Keywords**
- **Difference between input and output devices**
- **Q&A**
- **Assessment**



KEY WORDS

- **Input**
- **device**
- **Output**
- **use**
- **Information**
- **Enter**
- **Get**
- **example**
- **Keyboard, Mouse**
- **Printer, Monitor**

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DIFFERENCE BETWEEN INPUT AND OUTPUT DEVICES

Input Devices	Output Devices
An input device is used to enter data in computer.	An Output device is used to get information from computer.
Examples: Mouse, Keyboard	Examples: Monitor, Printer

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Q / A



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ASSESSMENT

What are the sign of

- input
- information
- Output
- Keyboard
- Monitor
- Use
- Get

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HOME TASK

- Write the difference between Input and output devices on your notebook



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Thank you



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-1	Network and its Types
TOPIC	Differentiate between LAN and WAN.
LESSON PLAN CODE:	CHN/II/7
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENTS

- **Keywords**
- **Difference between LAN and WAN**
- **Q&A**
- **Assessment**

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KEY WORDS

- **LAN**
- **WAN**
- **Geographical Area**
- **Operate World Wide**
- **Faster Speed**
- **Slower Speed**
- **Transfer / Transmit**

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DIFFERENCE BETWEEN LAN AND WAN

LAN	WAN
LAN is a network with small geographical area	WAN covers greater distance and operate worldwide.
LAN operates at a faster speed	Wan is slower than LAN
Data transfers more quickly through LAN	WAN transmits data at a slower rate than LAN

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Q / A



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ASSESSMENT

What are the sign of

- **Geographical**
- **Area**
- **Transmit**
- **Transfer**
- **Operate**

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HOME TASK

- Write the difference between LAN and WAN on your notebook



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Thank you



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-2	Peripheral Devices
TOPIC	Write a note on Peripheral devices.
LESSON PLAN CODE:	CHN/II/8
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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4. NAZMEEN AFZAL
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6. MUDASSIR YOUNIS
7. M. FARRUKH JAMEEL





CONTENTS

- **Keywords**
- **Peripheral devices**
- **Main types of peripheral devices**
- **Input Devices**
- **Output Devices**
- **Storage Devices**
- **Q&A**
- **Assessment**

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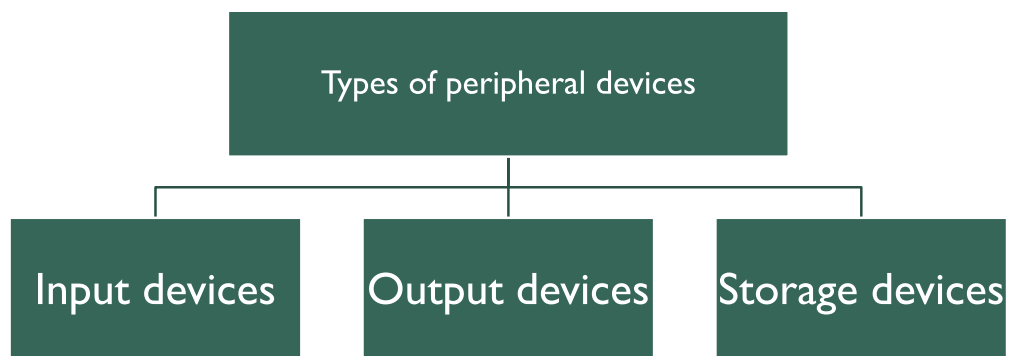
KEY WORDS

- **Peripheral devices**
- **Input Devices**
- **Output Devices**
- **Storage Devices**
- **hardware device**
- **sends data**
- **receives data**
- **store data**

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PERIPHERAL DEVICES



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INPUT DEVICES

- An Input device is any hardware device that sends data to a computer.



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OUTPUT DEVICES

- An Output device is any hardware device that receives data to a computer.



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STORAGE DEVICES

- A storage device is used to store data into a computer.



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Q / A



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ASSESSMENT

What are the sign of

- **Input Devices**
- **Output Devices**
- **hardware device**
- **sends data**
- **receives data**
- **store data**

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HOME TASK

- Write note on peripheral devices on your notebook



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Thank you



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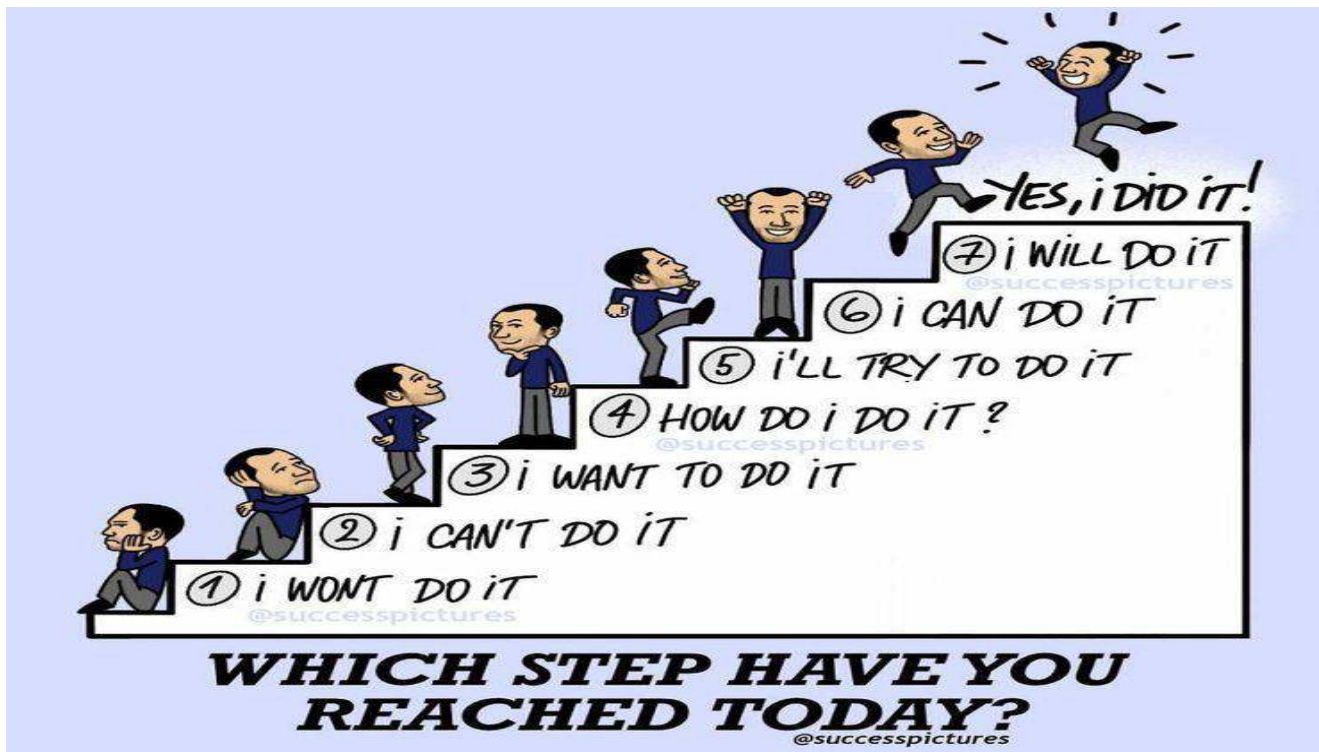
MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-3	Software Installation
TOPIC	Install 'WINRAR' utility software on a computer.
LESSON PLAN CODE:	CHN/II/9
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENT

- Keywords
- Install “WinRAR”
- Question & Answers
- Assessment
- Home task



KEYWORDS

- Backup
- winRAR
- Download
- Executable
- Confirm
- Changes
- Install
- Button
- Formats
- Select
- Successful

Lesson No. CHN/II/9

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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step I: Start installation from backup file or from internet or form CD



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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

Step 2: Click on the **Download WinRAR** button.



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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 3: Next Screen will Open Now Click on **Continue to Download WinRAR** Button



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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 4: Check for the executable file in the downloads folder of your system and open it.



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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 5: It will prompt confirmation to make changes to your system. Click “**YES**”

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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 6: After Clicking on the executable file the setup will start now. Click on the Install Button

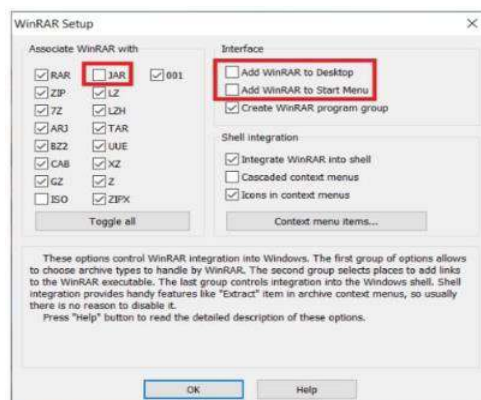


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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 7: Now After the Installation selects the All format and click on Add WinRAR to Desktop. After selecting click on the OK button.

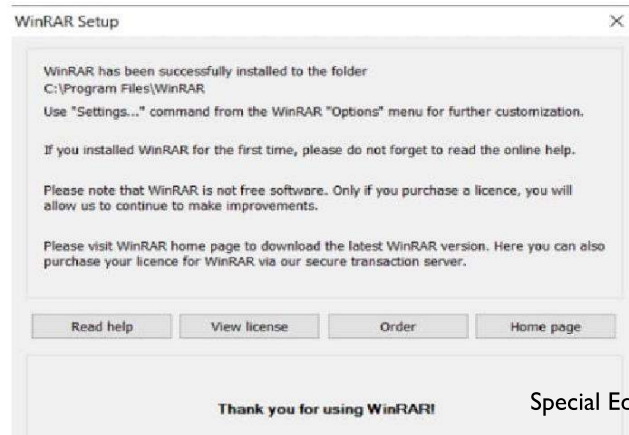


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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Step 8: The installation is finished Now Click on **DONE** Button.



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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- WinRAR is successfully installed on the system and an Icon is created on the Desktop



Now run the WinRAR software and see the interface.

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HOW TO INSTALL “WINRAR” ON YOUR COMPUTER?

- Video link of Installation of WinZip on Computer System.

https://www.youtube.com/watch?v=q_lkCNDMryI

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OUTCOMES OF THE LESSON

At the end of this lesson students will be able to

- ✓ install “WinRAR software on the Computer System”

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Q / A



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ASSESSMENT / EVALUATION

What are the sign of

- Backup
- Download
- Install
- Changes
- Button
- Confirm
- WInRAR
- Select

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HOME TASK

- Perform the Installation of WinRAR software on your computer.



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-II	COMPUTER HARDWARE AND NETWORKS-II
CHAPTER-3	Software Installation
TOPIC	Install 'AVAST Antivirus' utility software on a computer.
LESSON PLAN CODE:	CHN/II/10
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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INSTALL “AVAST ANTIVIRUS” UTILITY SOFTWARE ON A COMPUTER



Lesson No. CHN/II/10

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CONTENT

- Key Words
- Install “Avast Antivirus”
- Q/A
- Assessment/Evaluation
- Home Task

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KEY WORDS

- Insert
- AVAST Anti-Virus Software
- CD/DVD
- Follow
- Run
- Prompts
- Install / installation
- Remove

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INSTALL “AVAST ANTIVIRUS”

- Insert AVAST Anti-Virus Software CD/DVD
- RUN the AVAST Setup File.
- Follow the prompts to install the AVAST
- Wait for installation to complete.
- Remove AVAST Anti-Virus Software CD/DVD after completion.

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Q / A



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ASSESSMENT / EVALUATION

What are the signs of

- Insert
- AVAST Anti-Virus Software
- CD/DVD
- Follow
- Run

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HOME TASK

- Perform Installation process at your own computer at home



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Thank You!



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

TEAM MEMBERS

1. DR. KHURRAM GULZAR
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4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 01	Introduction to Computer Programming
TOPIC	Computer Science, Computer Thinking
LESSON PLAN CODE:	CP/I/01
VERSION:	01(26 TH APRIL, 2024)



CONTENTS

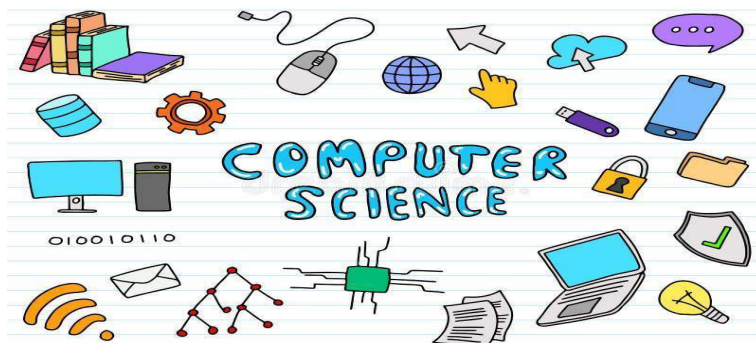
- Vocabulary
- What is Computer Science?
- What is Compute Thinking?
- Questions & Answers
- Assessment

Vocabulary

- ▶ Computer Science
- ▶ Computer thinking
- ▶ Hardware
- ▶ Software
- ▶ Computer Scientist

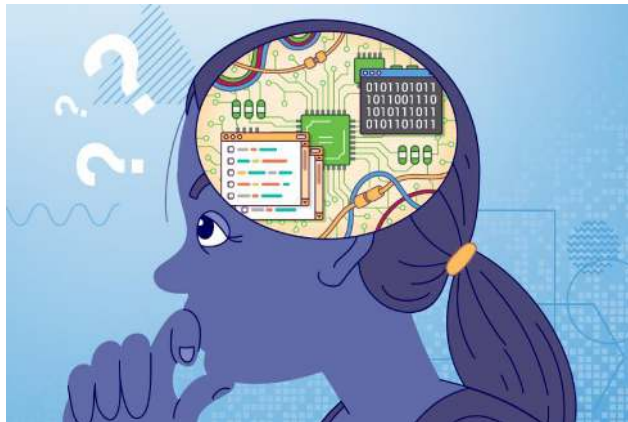
What is computer science?

- ▶ Computer science is the study of what computers can do using computer hardware and software.



What is computer thinking?

- Computer thinking is a thinking tool which is used by computer scientists



Assessment

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to learn the definition so that they could reproduce it.

Thank you



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MODULE	COMPUTER PROGRAMMING-I
CHAPTER 01	Defining Programming Languages
TOPIC	Computer Programming, Computer Language, Coding, Syntax, Computer Program, Programming Language, Names of Programming Languages
LESSON PLAN CODE:	CP/I/02
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD





MATRIC VOCATIONAL (COMPUTER GROUP)

Grade 9

Module: Computer Programming-I Chapter-2: Defining Programming Languages

Topic:

**Computer Programming, Computer Language, Coding, Syntax,
Computer Program, Programming Language, Names of Programming
Languages**

Lesson No. CP-I-2



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Government of the Punjab

CONTENTS

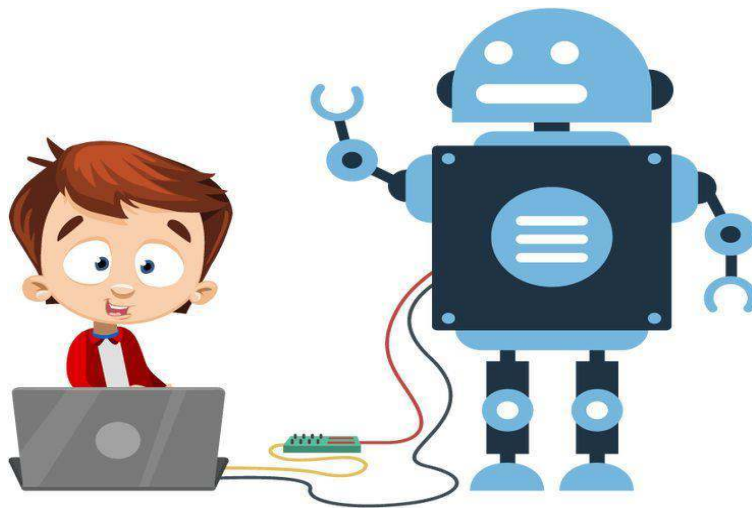
- Vocabulary
- What is computer programming?
- What is coding?
- What is programming language?
- What is syntax?
- What is computer program?
- Name some popular programming?
- Who is computer programmer?
- Questions & Answers
- Assessment

Vocabulary

- ▶ Computer Programming
- ▶ Computer Language
- ▶ Coding
- ▶ Syntax
- ▶ Computer Program
- ▶ Programming Language
- ▶ Grammatical Rules
- ▶ Java, C++

What is computer programming?

- ▶ Computer programming is making computer do things using computer languages.



What is coding?

- Coding is a set of instructions written in any language to make a computer program.



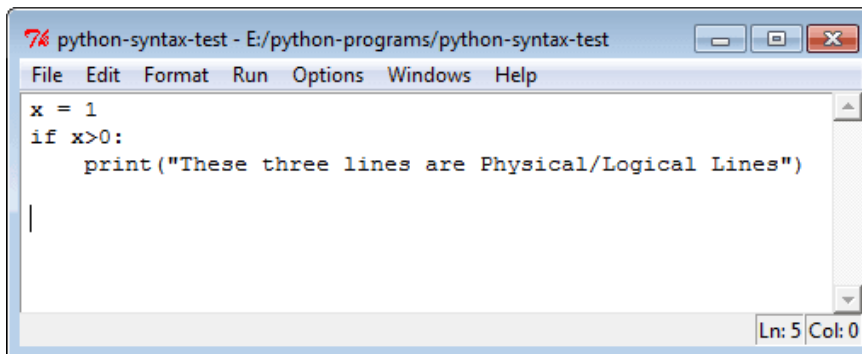
What is programming language?

- It is language used by computer programmer to communicate with computer.



What is syntax?

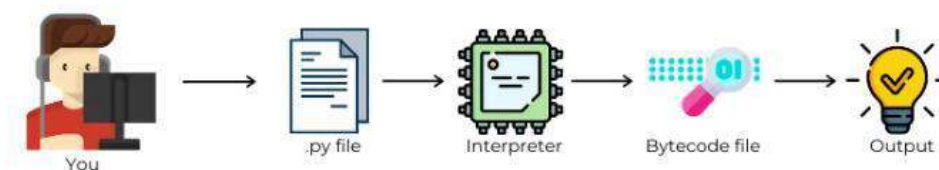
- The grammatical rules of a programming language are called syntax.



```
python-syntax-test - E:/python-programs/python-syntax-test
File Edit Format Run Options Windows Help
x = 1
if x>0:
    print("These three lines are Physical/Logical Lines")
|
Ln: 5 Col: 0
```

What is computer program?

- Computer program is a set of instructions written in any language.



Name some popular programming?

► Java

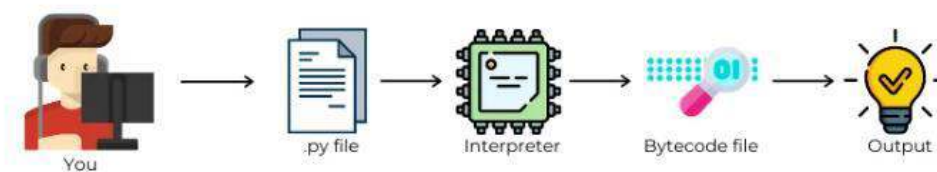


► C++



Who is computer programmer?

- The person who plans and supervises developing computer software is called computer programmer.



Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any
Questions???



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 03	Types of Computer Languages
TOPIC	Problem Analysis, Testing, Debugging, Test Data
LESSON PLAN CODE:	CP/II/03
VEISON:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD





MATRIC VOCATIONAL (COMPUTER GROUP)

Grade 9

Module: Computer Programming-I Chapter-3: Types of Programming Languages

Topic:

Problem Analysis, Testing, Debugging, Test Data

Lesson No. CP-I-3



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Government of the Punjab

CONTENTS

- Vocabulary
- What is problem analysis?
- What is testing?
- What is debugging?
- What is test data?
- Questions & Answers
- Assessment

Vocabulary

- ▶ Problem analysis
- ▶ Decomposing a problem
- ▶ Sub problem
- ▶ Debugging
- ▶ Test data

What is problem analysis?

- ▶ It is a process of defining and decomposing a problem into sub-problems.



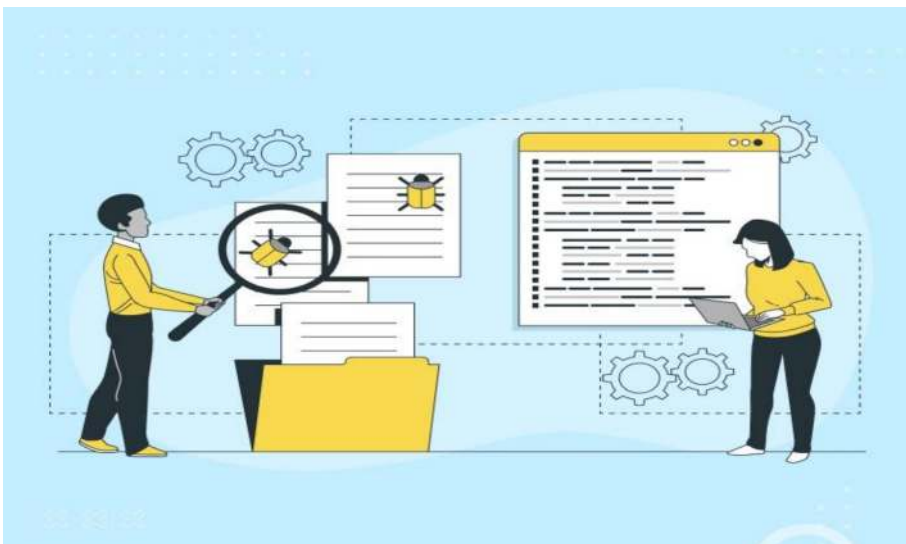
What is testing?

- Testing an algorithm or flow chart with the help of test data is called testing.



What is debugging?

- Testing a computer program using test data is called debugging



What is test data?

- The data used to test an algorithm, flow chart or a computer program is called test data.



Assessment

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to learn the definition so that they could reproduce it

Any Questions???





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TEAM MEMBERS

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2. MUHAMMAD BASIT SULTAN
3. WAJAHAT HUSNAIN
4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 03	Types of Computer Languages & Program Development Life Cycle
TOPIC	Program Development Life Cycle
LESSON PLAN CODE:	CP/II/04
VEISION:	01(26 TH APRIL, 2024)



CONTENTS

- Vocabulary
- What is Computer Programming?
- Steps of Program Development Life Cycle.
- Questions & Answers
- Assessment

Vocabulary

- ▶ Analyze the problem
- ▶ Design the program
- ▶ Code the program
- ▶ Debug the program
- ▶ Formalize the program
- ▶ Maintain and document the program

What is computer programming?

- ▶ Computer programming is making computer do things using computer languages.



List the steps of program development life cycle.

List of steps of:

- ▶ program development life cycle are as under:
- ▶ Analyze the problem
- ▶ Design the program
- ▶ Code the program
- ▶ Debug the program
- ▶ Formalize the program
- ▶ Maintain and document the program

Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any Questions???





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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

TEAM MEMBERS

1. DR. KHURRAM GULZAR
2. MUHAMMAD BASIT SULTAN
3. WAJAHAT HUSNAIN
4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 04	Drawing Flow Charts
TOPIC	Flow Charts, Terminal Symbol, Processing Symbol
LESSON PLAN CODE:	CP/II/05
VERSION:	01(26 TH APRIL, 2024)



CONTENTS

- Vocabulary
- What is Flow Chart?
- Terminal Symbol.
- Processing Symbol
- Questions & Answers
- Assessment

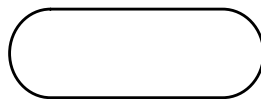
Vocabulary

- ▶ Algorithm
- ▶ Pictorial representation
- ▶ Flow chart
- ▶ Terminal Symbol
- ▶ Processing Symbol

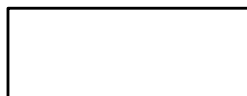
What is flow chart? Draw terminal and processing symbols

- ▶ Pictorial representation of an algorithm is called flow chart.

Terminal Symbol



Processing symbol



Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any
Questions???



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 04	Drawing Flow Chart
TOPIC	Flow Chart, Decision-making Symbol, Processing Symbol
LESSON PLAN CODE:	CP/I/06
VEISION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. DR. KHURRAM GULZAR
2. MUHAMMAD BASIT SULTAN
3. WAJAHAT HUSNAIN
4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD



CONTENTS

- Vocabulary
- What is Flow Chart?
- Decision-making Symbol.
- Processing Symbol
- Questions & Answers
- Assessment

Vocabulary

- ▶ **Algorithm**
- ▶ **Pictorial representation**
- ▶ **Flow chart**
- ▶ **Decision-making Symbol**
- ▶ **Processing Symbol**

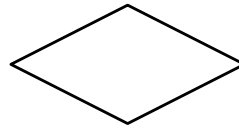
What is flow chart? Draw processing and decision-making symbols.

- Pictorial representation of an algorithm is called flow chart.

Processing symbol



Decision-making symbol



Assessment

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to learn the definition so that they could reproduce it

Any Questions???





In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

TEAM MEMBERS

1. DR. KHURRAM GULZAR
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7. MUDASAR MAQSUD

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 04	Drawing Flow Chart
TOPIC	Flow Chart, Flow-line Symbol, Input Symbol
LESSON PLAN CODE:	CP/I/07
VEISION:	01(26 TH APRIL, 2024)



CONTENTS

- Vocabulary
- What is Flow Chart?
- Flow-line Symbol.
- Input/output Symbol
- Questions & Answers
- Assessment

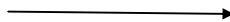
Vocabulary

- ▶ Algorithm
- ▶ Pictorial representation
- ▶ Flow chart
- ▶ Input/output Symbol
- ▶ Flow-line Symbol

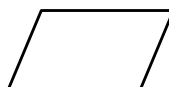
What is flow chart? Draw flow line symbol and input symbol.

- ▶ Pictorial representation of an algorithm is called flow chart.

Flow-line symbol



Input symbol



Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any
Questions???



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 06	Writing Algorithm
TOPIC	Algorithm, Processing, Terminal
LESSON PLAN CODE:	CP/I/08
VEISON:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. DR. KHURRAM GULZAR
2. MUHAMMAD BASIT SULTAN
3. WAJAHAT HUSNAIN
4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD



CONTENTS

- Vocabulary
- What is Algorithm?
- Processing Symbol
- Terminal Symbol
- Questions & Answers
- Assessment

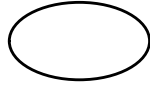
Vocabulary

- ▶ **Algorithm**
- ▶ **Step-by-step process**
- ▶ **To perform**
- ▶ **Task**
- ▶ **Terminal**
- ▶ **Processing**

What is algorithm? Write keyword for ○ and □ symbols.

- Step-by-step process to perform a task is called algorithm.

Terminal symbol



Processing Symbol



Assessment

- Teacher will ask students to describe the learnt words with the help of sign language
- Students will be asked to learn the definition so that they could reproduce it

Any Questions???





In-Service Training Program for Capacity Building



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

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5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 06	Writing Algorithm
TOPIC	Algorithm, Processing, Decision-making symbol
LESSON PLAN CODE:	CP/I/09
VERSION:	01(26 TH APRIL, 2024)



CONTENTS

- Vocabulary
- What is Algorithm?
- Processing Symbol
- Decision-making Symbol
- Questions & Answers
- Assessment

Vocabulary

- ▶ Algorithm
- ▶ Step-by-step process
- ▶ To perform
- ▶ Task
- ▶ Decision-making Symbol
- ▶ Processing

What is algorithm? Write keyword for and symbols.

- ▶ Step-by-step process to perform a task is called algorithm.
- ▶ Processing symbol
- ▶ Decision-making symbol

Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any
Questions???



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

MODULE	COMPUTER PROGRAMMING-I
CHAPTER 06	Writing Algorithm
TOPIC	Algorithm, Terminal, Decision-making symbol
LESSON PLAN CODE:	CP/II/10
VESSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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3. WAJAHAT HUSNAIN
4. FAHAD ZUBAIR
5. HASEEB ASLAM
6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD



CONTENTS

- Vocabulary
- What is Algorithm?
- Terminal Symbol
- Decision-making Symbol
- Questions & Answers
- Assessment

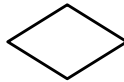
Vocabulary

- ▶ **Algorithm**
- ▶ **Step-by-step process**
- ▶ **To perform**
- ▶ **Task**
- ▶ **Decision-making Symbol**
- ▶ **Terminal Symbol**

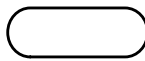
What is algorithm? Write keyword for  and  symbols.

- ▶ Step-by-step process to perform a task is called algorithm.

- ▶ Decision-making symbol



- ▶ Terminal symbol



Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any Questions???





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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-09

TEAM MEMBERS

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MODULE	COMPUTER PROGRAMMING-I
CHAPTER 06	Microsoft Visio
TOPIC	Perform Practical Activities in Microsoft Visio
LESSON PLAN CODE:	CP/II/11
VERSION:	01(26 TH APRIL, 2024)



CONTENTS

- Vocabulary
- Activities in Microsoft Visio
- Example Flow Chart
- Questions & Answers
- Assessment

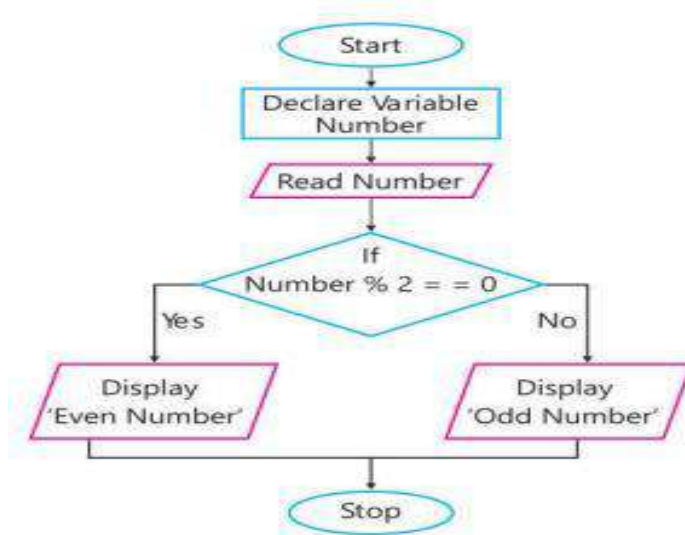
Vocabulary

- ▶ Microsoft Visio
- ▶ New File
- ▶ Draw
- ▶ Terminal Symbol
- ▶ Input/output Symbol
- ▶ Processing Symbol
- ▶ Decision-making Symbol
- ▶ Save File
- ▶ Flow Line

Activities

- ▶ Open Microsoft Visio to create a new file and draw terminal symbol and save that file.
- ▶ Open Microsoft Visio to create a new file and draw processing symbol and save that file.
- ▶ Open Microsoft Visio to create a new file and draw decision making symbol and save that file.
- ▶ Open Microsoft Visio to create a new file and draw Input/output symbol and save that file.
- ▶ Open Microsoft Visio, draw input symbol with processing symbol and connect them with the help of flow line.
- ▶ Open Microsoft Visio, draw processing symbol with decision making symbol and connect them with the help of flow line.
- ▶ Open Microsoft Visio, draw decision making symbol and connect it with terminal symbol with the help of flow line.

Flow Chart Example



Assessment

- ▶ Teacher will ask students to describe the learnt words with the help of sign language
- ▶ Students will be asked to learn the definition so that they could reproduce it

Any Questions???





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Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-1	Introduction to programming editor
TOPIC	Editor & Programming Editor
LESSON PLAN CODE:	CP/II/I
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENTS

- Editor
- Examples of Editors
- Programming editor
- Examples of Programming Editors
- Assessment/Lab Work

WHAT IS AN EDITOR?

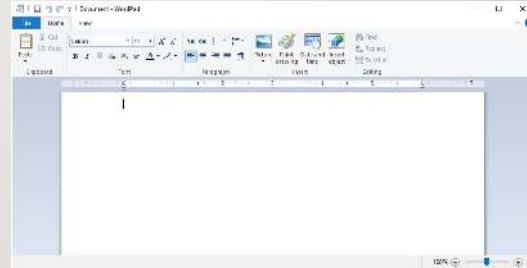
Editors or text editors are software programs that enable the user to create and edit text files

EXAMPLES OF EDITORS

Notepad

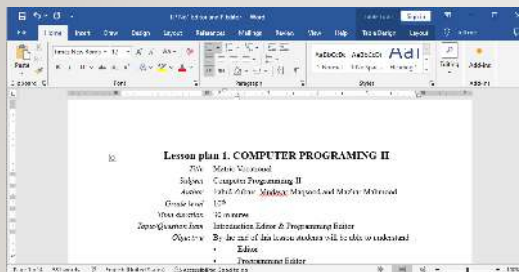


Wordpad

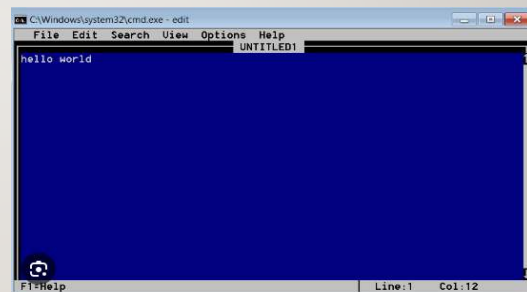


EXAMPLES OF EDITORS

MS Word



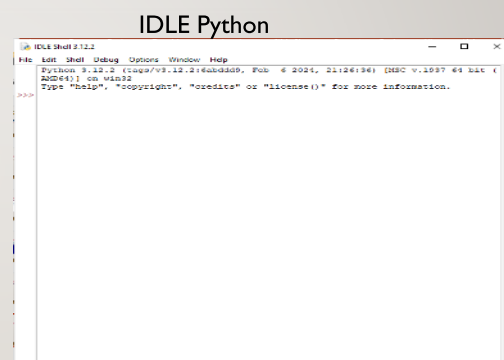
DOS Editor



WHAT IS PROGRAMMING EDITOR?

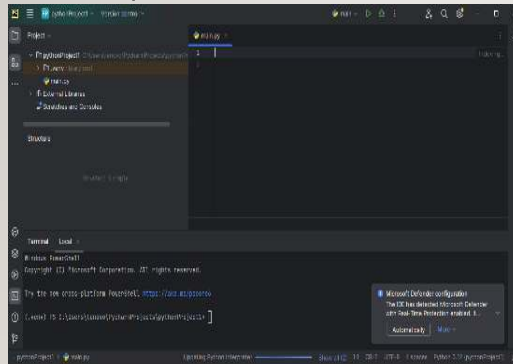
In computer programming, editor is the source code editor that include many special features for writing and editing programming code

EXAMPLES OF PROGRAMING EDITORS

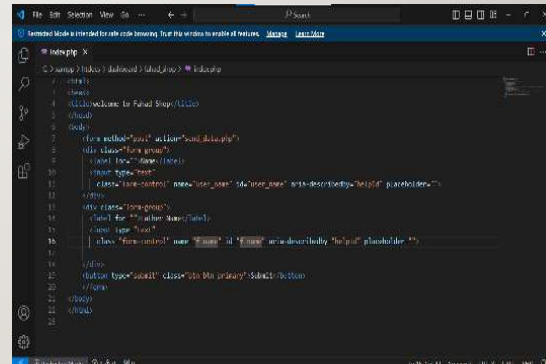


EXAMPLES OF PROGRAMING EDITORS

PyCharm



VS Code



ASSESSMENT/LAB WORK

- What is purpose of editor
- What is purpose of programming editor
- students describe difference between editor and programming editor
- Students open different text editors
- Student open IDLE Python Editor

THANKS 😊



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SPECIAL EDUCATION DEPARTMENT
Government of the Punjab

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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-2	Introduction TO Python EDITOR (Compiler)
TOPIC	IDLE Python
LESSON PLAN CODE:	CP/II/2
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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SULTAN
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4. FAHAD ZUBAIR
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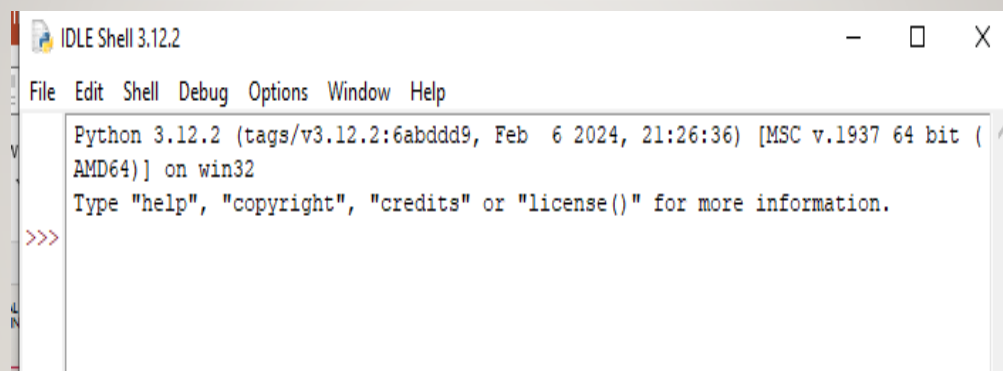
CONTENTS

- What is an IDLE (Python)?
- Introduction to IDLE (python)
- Installation IDLE
- Print "hello world" IDLE(python)
- Assessment/Lab Work

WHAT IS AN IDLE (PYTHON)?

- IDLE stands for integrated development & learning Environment
- It is an editor for Python. When we install Python, IDLE is also installed by default.

INTRODUCTION TO IDLE (PYTHON)

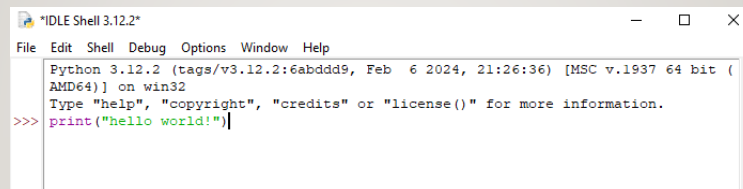


INSTALLATION IDLE

- From <https://www.python.org/download/releases/3.12.2> download
- Run the downloaded executable file
- Select install for all users or install just for me, click Next
- Click Next again for the 'Customize Python' step and Click Finish.

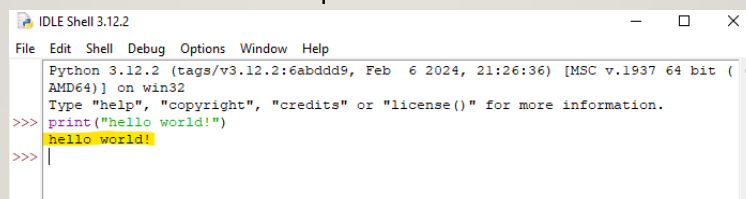
PRINT "HELLO WORLD" IDLE(PYTHON)

Source Code



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> print("hello world!")
```

Output



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> print("hello world!")
hello world!
>>>
```

ASSESSMENT/LAB WORK

- Each Student will open IDLE on computer system
- Students will use python IDLE to print his/her name and display on screen

THANKS 😊



In-Service Training Program for Capacity Building



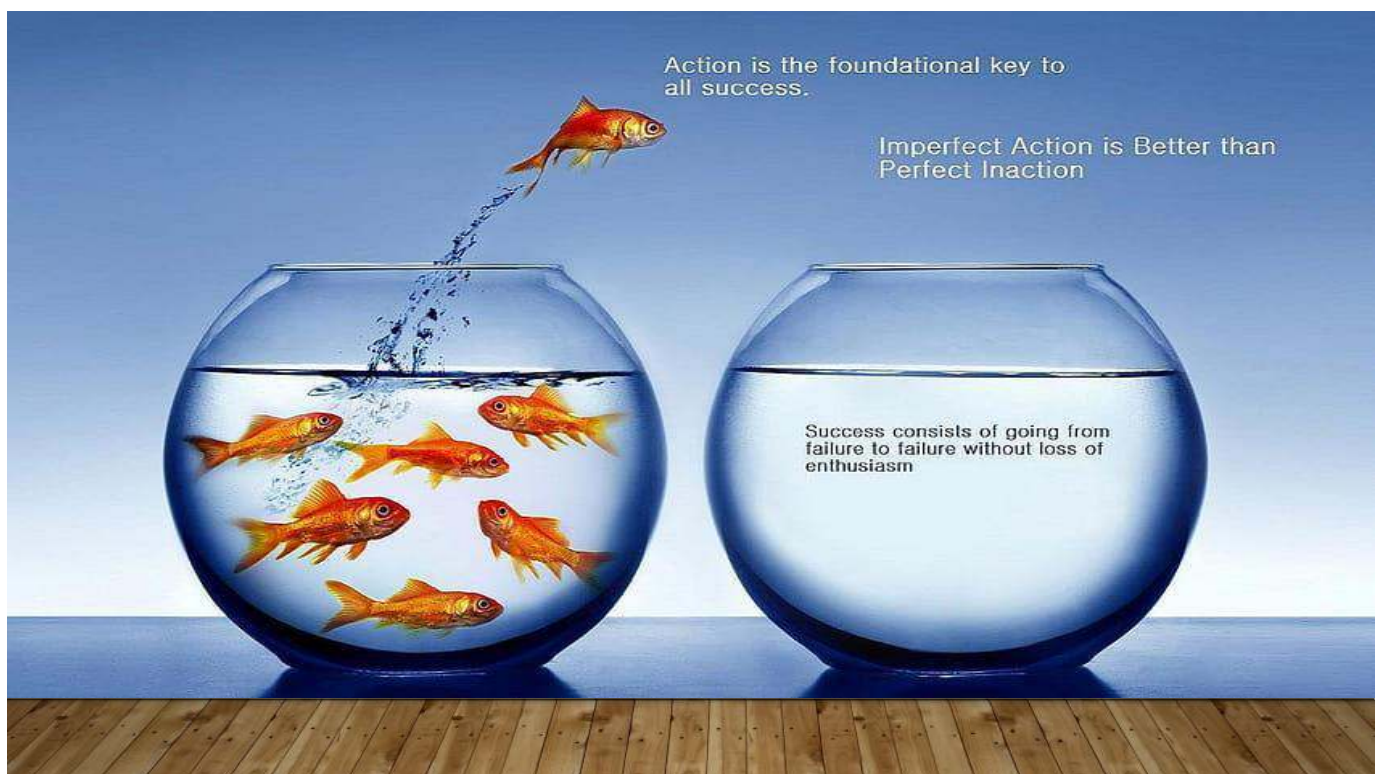
Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-4	Structure & syntax of a program in Python
TOPIC	Rules of python variables & String variables
LESSON PLAN CODE:	CP/II/3
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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6. MAZHAR MAHMOOD
7. MUDASAR MAQSUD



CONTENTS

- Variable
- Rules of Python Variable
- String Variables
- Assessment/Lab Work

WHAT IS VARIABLE?

A Python variable is a reserved memory location to store values

For examples

```
x="abc"
```

```
y=12
```

```
z=3.5
```

```
a="hello 123"
```


RULES OF PYTHON VARIABLES

- A variable name must start with a letter or the underscore character

```
_var="hello"
```

```
pet_name="Tom"
```

- A variable name cannot start with a number

```
14th_aug="Pakistan" (Invalid variable name)
```

RULES OF PYTHON VARIABLES

- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)

```
aug_14th="Pakistan" (valid variable name)
```

- Variable names are case-sensitive

For example

age, Age and AGE are three different variables

RULES OF PYTHON VARIABLES

- A variable name cannot be any of the Python keywords like if, else, and, def.
- For example
- `def=15` (**Invalid variable name**)

WHAT IS STRING VARIABLE IN PYTHON ?

The variable that store one and more characters those can be numeric, letters alphanumeric, and special characters.

Example:

```
country="Pakistan"  
indep_day="14thAugust_1947"
```

ASSESSMENT/LAB WORK

- Students will create different valid variables name in python IDLE
- Student will create string variable

THANKS 😊



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-5	Create Program using Python
TOPIC	Built-in data types
LESSON PLAN CODE:	CP/II/4
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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7. MUDASAR MAQSUD



CONTENTS

- Data Types
- Built-in Data Type in Python
- Integer data types in python
- Float data types in python
- String data types in python
- Assessment and Lab Work

WHAT IS DATA TYPES?

It represents the kind of value that tells what operations can be performed on a particular data

BUILT-IN DATA TYPES IN PYTHON

The following are built-in data types in Python:

Integer

Float

String

INTEGER DATA TYPES IN PYTHON

It contains positive or negative whole numbers (without fractions or decimals)

For example

`x=12`

`b= -5`

FLOAT DATA TYPES IN PYTHON

It contains positive or negative numbers with fractions or decimals

For example

```
x=12.0
```

```
b= -5.5
```

STRING DATA TYPES IN PYTHON

A string is a collection of one or more characters put in a double-quote.

For example

```
string1="hello world!"
```

```
string2="hello 123"
```

ASSESSMENT/LAB WORK

- Students will create different data types variable
- Create a program using python IDLE, save your age in variable1 and save your name in variable2

THANKS 😊



In-Service Training Program for Capacity Building



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MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-5	Create Program using Python
TOPIC	Assign value to variable in python & Print statement
LESSON PLAN CODE:	CP/II/5
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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7. MUDASAR MAQSUD



1



CONTENTS

- Assign Value to Variable
- Print Function
- Using Assignment operator
- Assessment/Lab Work

ASSIGN VALUE TO VARIABLE ?

The = symbol is known as the assignment operator

For example

age=15

Name="Usman"

PRINT FUNCTION

The print() function prints the specified message to the screen

For example

```
print("hello")  
"hello" will be print on screen
```

```
name="Usman"  
Print(name)  
"usman" will be print on screen
```

USING ASSIGNMENT OPERATOR

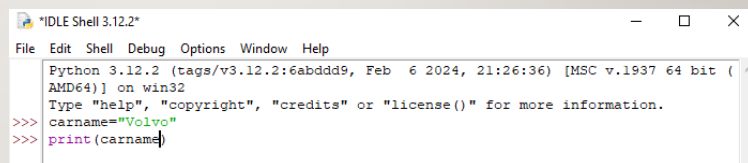
Create a variable named carname and assign the value Volvo to it and print on screen in Python IDLE.

Syntax

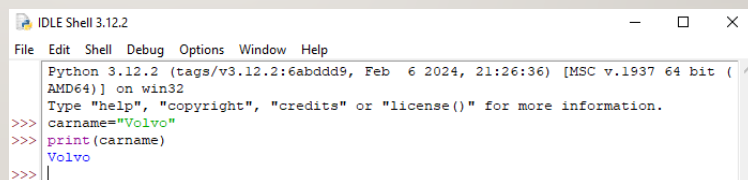
```
Carname="VOLVO"  
print("Carname")
```

Output

Volvo



```
IDLE Shell 3.12.2  
File Edit Shell Debug Options Window Help  
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>> carname="Volvo"  
>>> print(carname)
```



```
IDLE Shell 3.12.2  
File Edit Shell Debug Options Window Help  
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>> carname="Volvo"  
>>> print(carname)  
Volvo  
>>> |
```

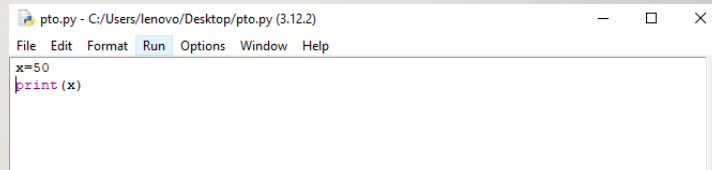
CREATE A VARIABLE NAMED X AND ASSIGN THE VALUE 50 TO IT.

Syntax

```
x=50  
print(x)
```

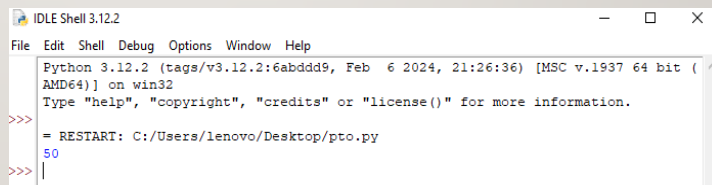
Output

50



The screenshot shows a window titled 'pto.py - C:/Users/lenovo/Desktop/pto.py (3.12.2)'. The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains the following code:

```
x=50  
print(x)
```



The screenshot shows the IDLE Shell window for Python 3.12.2. The menu bar includes File, Edit, Shell, Debug, Options, Window, and Help. The shell displays the following text:

```
>>> Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32  
>>> Type "help", "copyright", "credits" or "license()" for more information.  
>>> = RESTART: C:/Users/lenovo/Desktop/pto.py  
>>> 50  
>>> |
```

ASSESSMENT/LAB WORK

- Students will assign value of your age and name in var1 and var2 and print it on screen

THANKS 😊



In-Service Training Program for Capacity Building



SPECIAL EDUCATION DEPARTMENT
Government of the Punjab

Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-5	Create Program using Python
TOPIC	Input function
LESSON PLAN CODE:	CP/II/06
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

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CONTENTS

- Input Functions
- Using Input Functions to get value
- Assessment
- Assessment/Lab Work

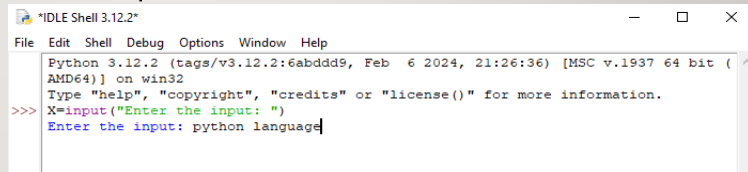
WHAT IS INPUT FUNCTION?

The python input() function is used to ask input from the user

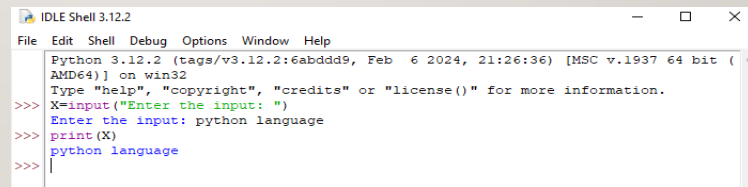
Example

X=input("Enter the input:")

when user enter input in IDLE Shell then input store in x variable



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> X=input("Enter the input: ")
Enter the input: python language
```



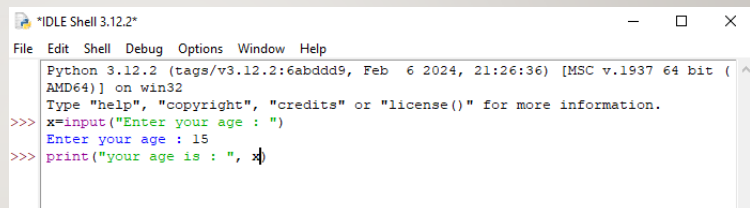
```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> X=input("Enter the input: ")
Enter the input: python language
>>> print(X)
python language
>>>
```

USE INPUT FUNCTION TO GET THE VALUE OF VARIABLE FROM USER

Syntax

x=input("Enter your age :")

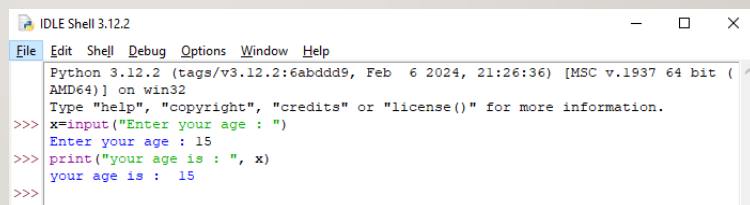
print("your age is :", x)



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=input("Enter your age : ")
Enter your age : 15
>>> print("your age is : ", x)
```

Output

your age is : 15



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=input("Enter your age : ")
Enter your age : 15
>>> print("your age is : ", x)
your age is : 15
>>>
```

ASSESSMENT/LAB WORK

- Students will write a program in python IDLE to ask the user name and school name from user by input function and display user name and its school name on screen.

THANKS 😊



In-Service Training Program for Capacity Building



Teaching Aids

MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-5	Create Program using Python
TOPIC	Arithmetic operators : addition(+), subtraction(-), multiplication(*), division(/) Operator
LESSON PLAN CODE:	CP/II/07
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. DR. KHURRAM GULZAR
2. MUHAMMAD BASIT SULTAN
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7. MUDASAR MAQSUD



CONTENTS

- Addition operator (+)
- Subtraction operator (-)
- Multiplication operator (*)
- Division operator (/)
- Assessment/Lab Work

ADDITION OPERATOR (+)

Addition operator is used to add two or more numbers

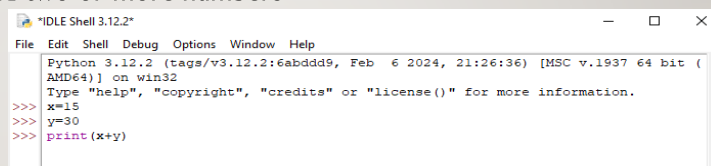
Example

`x=15`

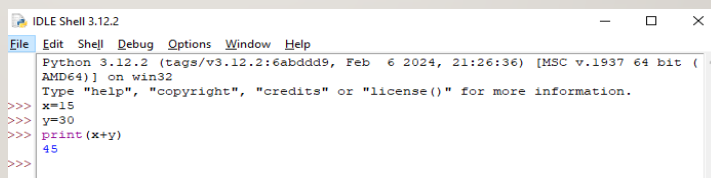
`y=30`

Print (x+y)

The output will be 45



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=15
>>> y=30
>>> print(x+y)
```



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=15
>>> y=30
>>> print(x+y)
45
>>>
```

SUBTRACTION OPERATOR (-)

Addition operator is used to subtract two or more numbers

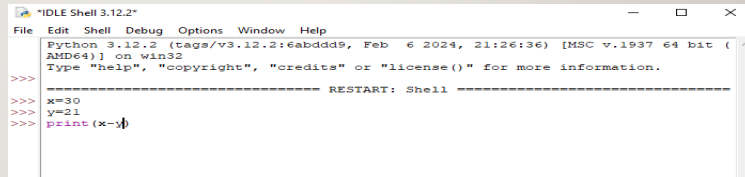
Example

x=30

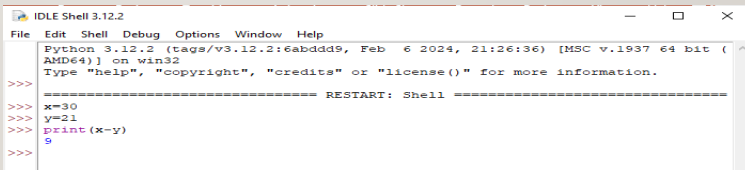
y=21

Print (x-y)

The output will be 9



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
>>> x=30
>>> y=21
>>> print(x-y)
```



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
>>> x=30
>>> y=21
>>> print(x-y)
9
>>>
```

MULTIPLICATION OPERATOR (*)

Addition operator is used to multiply two or more numbers

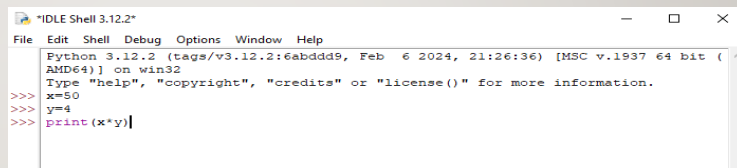
Example

x=50

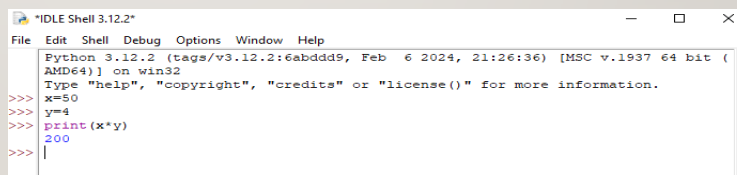
y=4

Print (x*y)

The output will be 200



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
>>> x=50
>>> y=4
>>> print(x*y)
```



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
>>> x=50
>>> y=4
>>> print(x*y)
200
>>>
```

DIVISION OPERATOR (/)

Addition operator is used to multiply two or more numbers

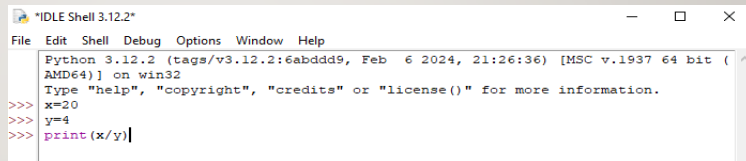
Example

x=20

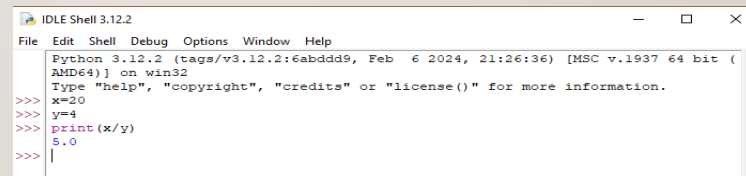
y=4

Print (x/y)

The output will be 5



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=20
>>> y=4
>>> print(x/y)
```



```
Python 3.12.2 (tags/v3.12.2:6abddd9, Feb 6 2024, 21:26:36) [MSC v.1937 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> x=20
>>> y=4
>>> print(x/y)
5.0
>>>
```

ASSESSMENT/LAB WORK

- Students will write a program to add two numbers using IDLE python and print it on screen
- Students will write a program to subtract two numbers using IDLE python and print it on screen
- Students will write a program to multiply two numbers using IDLE python and print it on screen
- Students will write a program to divide two numbers using IDLE python and print it on screen

THANKS 😊



In-Service Training Program for Capacity Building



SPECIAL EDUCATION DEPARTMENT
Government of the Punjab

Teaching Aids

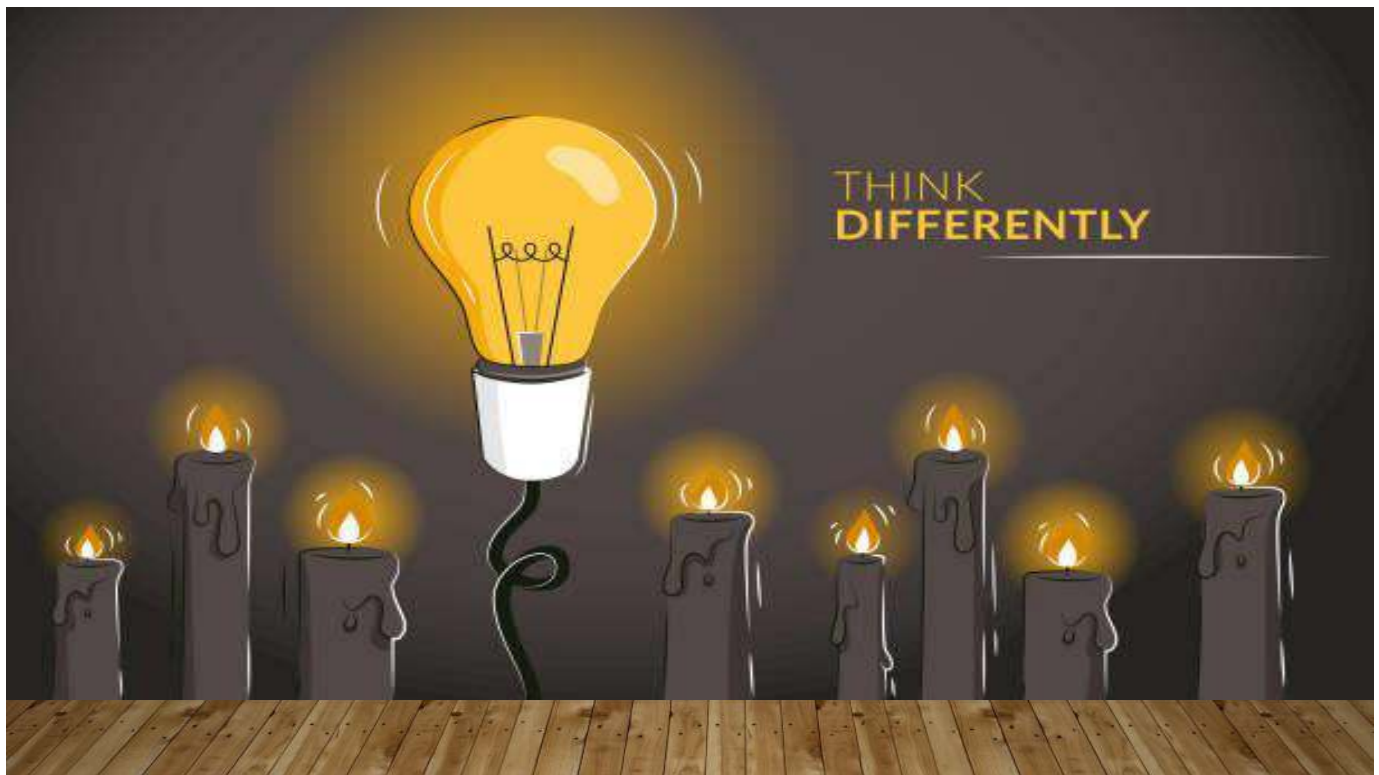
MATRIC VOCATIONAL (COMPUTER GROUP) GRADE-10

MODULE-III	COMPUTER PROGRAMMING-II
CHAPTER-5	Create Program using Python
TOPIC	Python Language and its uses
LESSON PLAN CODE:	CP/II/8
VERSION:	01(26 TH APRIL, 2024)

TEAM MEMBERS

1. DR. KHURRAM GULZAR
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CONTENTS

- What is Python
- Uses of Python
- Assessment/Lab Work

WHAT IS PYTHON?



Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis.

USES OF PYTHON



- Data analysis and machine learning
- Web development
- Automation or scripting
- Software testing and prototyping.

ASSESSMENT/LAB WORK

- Students will be asked to respond the question 'What is the use of python language

THANKS 😊

Vocabulary with Signs

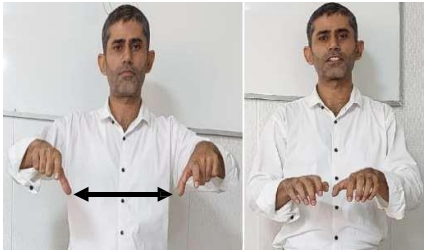


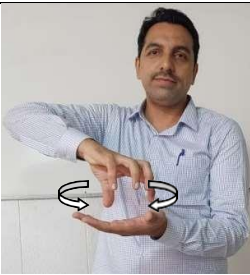
1. Vocabulary List

A	Adobe Photoshop, Anti-Virus, Android, Application, Software, Algorithm, Artificial Intelligence
B	Browser, Bit, Bluetooth, Bus Network, Byte, Bold, Bullets, Backspace
C	Computer, CD Rom, Computer Virus, Connector, CPU (Central Processing Unit), C++, Computer Programming, Control Panel, Computer File, Computer Program, Cursor, Cut, Copy, C#, Client, Constant, Caption, Coding, Computer Language, Cable, Card Reader, Computer Casing, Cybercrime, Columns, Communication Devices, Close
D	Digital Camera, Data Entry, Data File, Delete, Desktop, Download, Dialogue Box, Drop Box, Data Type, Document, Data Communication, Display, Design
E	E-Mail, E-Commerce, Excel, Editor, Electronic Device, E-Learning
F	Folder, Flash Drive, Floppy Disk Drive, File Format, File Extension, Flowchart, 5g Technology, Footer, Formatting
G	Giga Byte, Google, Geographical Area, Generations of Computer, Google Sheets, Graphics
H	Hard Disk, Headphones, Homepage, Hypertext, Hardware, Hub, Html, Hacking, Header, Hyperlink
I	Internet, InPage, Input Device, Information, Icon, Import, Information Technology, Instagram, ISP, Integer, ICT (Information Communication Technology), Insert
J	Joystick, Java
K	Keyboard, Keypad, Kilobyte, Loop
L	Laptop, Led, Lan, Layout
M	Megabyte, Memory, Microphone, Modem, Monitor, Motherboard, Message, Mouse, MS Office (Micro Soft Office), Man, Messenger, MS Visio, Multimedia Presentation, Maximize, Minimize
N	Network Card, Network, Network Topology
O	Offline, Online, Operating System, Output Device, Open a File
P	Power Supply, Printer, Processor, Projector, Power Point, Pdf, Programming Language, Python, Print a Document, Port, Process, Program, Paste, Print
Q	Quick Access Tollbar, Quick Print

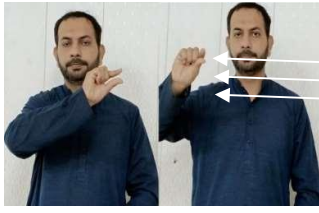
R	Ram, Rom, Reboot, Receiver, Recycle Bin, Restart, Router, Radio Wave Transmission, Rows, Robot, Restore, Replace
S	Scanner, Skype, Software, Speaker, Software, Screensaver, Scroll Bar, Slide Show, Snapchat, Start Menu, Storage Device, Search Engine, Settings, Share, Server, Source Code, Switch, Syntax, Save file or document, Select Text, Soundcard, Social Media, Spell Checker, Shut Down
T	Toolbar, Touchscreen, Taskbar, Tools
U	USB, Upload, URL, User Account, User Name, Undo
V	Video Clip, Video Conferencing, Variable, Video card, Webcam, Virtual Reality
W	Webcam, Windows, Word Document, Website, Webpage, WWW Wan, WiFi, WhatsApp, Word Processor, Wireless
X	---
Y	YouTube
Z	Zip Drive, Zoom

Sign Language

		
Computer 	Mouse 	Keyboard 
		
Laptop	RAM	ROM
		
Web Cam	Printer	Hard Disk
		
USB	LED	Headphone
		
Joystick	WWW	LAN

		
Data	URL	Java
		
HTML	C++	Cable
		
Data Cable	WIFI	Scanner
		
Disk	Speaker	Modem
		
Video	Digital Camera	Internet
		
Network /Networking	Network Card	Network Topology

		
Download	Upload	Bluetooth
		
Online	Offline	Print
		
Website	Web page	Messenger
		
Message	Email	Instagram
		
Snapchat	Skype	Youtube
		
WhatsApp	Tools	Copy

		
Cut	Save	Delete
		
Columns	Rows	File
		
Folder	Paint	Inpage
		
Word	Excel	Power Point
		
ALU	Icon	Hardware

Software	Google	Google Sheet
		
Bit	Nibble	Byte
		
Megabyte (MB)	Gigabyte (GB)	Paste
		



2. Formative Assessment

Model Paper of Computer Applications-I
Matric Vocational (Computer Group) 2-Years Course
Annual Examinations 2023
(OBJECTIVE)

Part-A

Time:20Minutes

Marks: 06

Note: This part is compulsory. It should be attempted on the Question Paper & returned to the Supervisory Staff after the prescribed time. Cutting, overwriting and use of lead pencil is not allowed. Supervisory staff is requested to attach it with the answerbook.

QNo.1Choosethecorrectanswerandencircleit.

(06x1) = 06

- (i) Computer is an _____ device.
 - (a) Electronic
 - (b) Electric
 - (c) Mechanical
 - (d) Magnetic
- (ii) The technology used in second generation is
 - (a) Vacuum Tubes
 - (b) ICs
 - (c) Transistors
 - (d) CPU
- (iv) Computer systems are used in.
 - (a) Offices
 - (b) Schools
 - (c) Industry
 - (d) All of these
- (v) Physical parts of computer that can be touched are called.
 - (a) Software
 - (b) Hardware
 - (c) Both a & b
 - (d) None of these
- (vi) This is a feature of windows that allows user to view and change system settings.
 - (a) Taskbar
 - (b) Control Panel
 - (c) Icon
 - (d) Folder
- (vii) It is a folder that contains deleted objects.
 - (a) Desktop
 - (b) Laptop
 - (c) Recycle bin
 - (d) Control Panel

Model Paper of Computer Applications-I
Matric Vocational (Computer Group) 2-Years Course
Annual Examinations 2023
(SUBJECTIVE)

Part-B

Time: 1 hour 10 minutes

Marks: 14

Q.1 : Attempt any four (4) short Questions.

4x2=8

- i. Name common parts of Computer.
- ii. Briefly describe classification of Computer.
- iii. What is desktop?
- iv. Describe purpose of Add/Remove program feature.
- v. What is Control Panel?

Q.2 : Attempt any one (1) long Question.

1x6=6

- i. What is the difference between hardware and software?
- ii. Write a note on technologies used in different generation of computer?

4.2. Model Paper of Computer Hardware & Network-I

Model Paper of Computer Hardware & Network-I

Matric Vocational (Computer Group) 2-Years Course

Annual Examinations 2023

(OBJECTIVE)

Part-A

Time: 20 Minutes

Marks: 06

Note: This part is compulsory. It should be attempted on the Question Paper & returned to the Supervisory Staff after the prescribed time. Cutting, overwriting and use of lead pencil is not allowed. Supervisory staff is requested to attach it with the answer book.

Q No.1 Choose the correct answer and encircle it. 06x1 = 06

- (i) This device converts digital data to analog format.
 - (a) CPU
 - (b) Modem
 - (b) Mouse
 - (d) Monitor
- (ii) This device works at physical layer of network.
 - (a) Hub
 - (b) Switch
 - (c) Both a & b
 - (d) None
- (iii) This device is used to display images etc on the screen of computer.
 - (a) Keyboard
 - (b) Hub
 - (c) Display card
 - (d) System Unit
- (iv) It is called the brain of the computer.
 - (a) Processor
 - (b) Monitor
 - (b) Printer
 - (d) All of these
- (v) It is temporary memory.
 - (a) RAM
 - (b) ROM
 - (c) Hard disk
 - (d) USB
- (vi) Computer parts are of _____ types.
 - (a) 2
 - (b) 3
 - (c) 4
 - (d) 5

6.3 Model Paper of Computer Hardware & Network-I

**Model Paper of Computer Hardware & Network-I
Matric Vocational (Computer Group) 2-Years Course
Annual Examinations 2023
(SUBJECTIVE)**

Part-B

Time: 1 hour 10 minutes

Marks: 14

(Short Questions)

Q.1: Attempt any four Questions. 4x2=8

- i. What is Modem?
- ii. What is motherboard?
- iii. What is Hard Disk drive?
- iv. What is function of Power Supply?
- v. What is Router?

(Long Question)

Q.2: Attempt anyone Question.

1x6=6

- i. What is the difference between serial and parallel ports?
- i. Differentiate between Hub and Switch.

7. Conclusion

Finally, a training course is set to take place at the Government In-service Training College in Lahore, specifically tailored for Computer Instructors and teachers within the Special Education Department who are teaching matric vocational computer group to hearing impaired students.

The course aims to equip teachers of hearing-impaired students with teaching aids including vocabulary with sign language to impart theoretical part more effectively. This module offers valuable resources such as a course of study, an academic calendar, lesson planning guidance, presentations, list of relevant vocabulary with signs and model papers for formative assessment.

This training will greatly benefit teachers and computer instructors in effectively communicating with Hearing-Impaired Children, ultimately leading to improved concept clarity and student understanding. The exact training date will be determined by the relevant authorities upon approval of this module.

Additionally, it is essential to equip each institute with a multimedia projector as an indispensable assistive teaching aid especially to the institution where Matric Vocational Program is being implemented.



GOVERNMENT OF PUNJAB
DIRECTORATE GENERAL OF SPECIAL EDUCATION