A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC) (Affiliated to Adikavi Nannaya University) Jagannaickpur, Kakinada.

DEPARTMENT OF COMPUTER SCIENCE

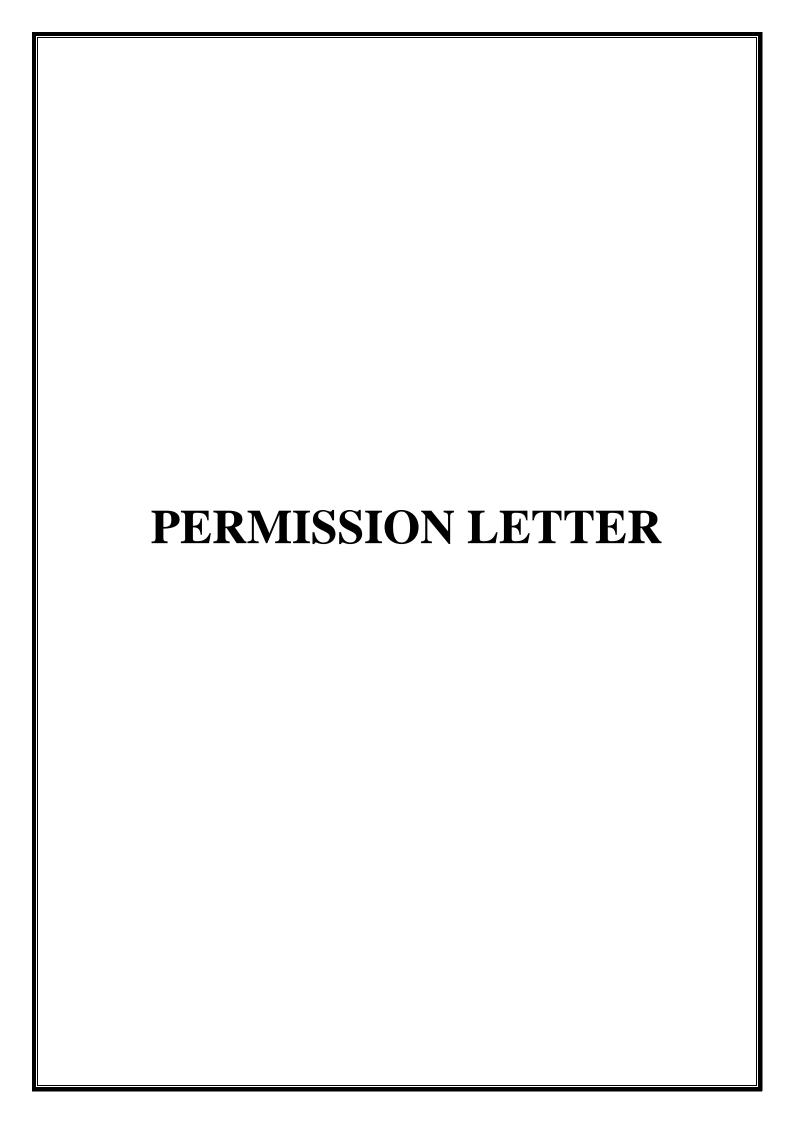


CERTIFICATE COURSE

ON

Information Technology Skills

2021-2022



From
N. Naga Subrahmanyeswari,
Lecturer In-Charge,
Department of Computer Science and Applications
A.S.D. Govt Degree College for Women (A),
Kakinada.

To The Principal A.S.D. Govt Degree College (W) (A), Kakinada.

Respected Madam,

Sub : A.S.D. G.D.C.W(A) - Department of Computer Science and Applications— Request to initiate a Certificate Course on "**Information Technology Skills**" for I / II / III Year students of any stream -Reg.

I submit that the Department of Computer Science and Applications has decided to offer a Certificate Course on "Information Technology Skills" for I / II / III Year students of any stream for the Academic Year 2021-22. In this regard, I request you to kindly give us permission to conduct

the proposed Certificate Course. The copy of the syllabus is here with enclosed for your kind perusal.

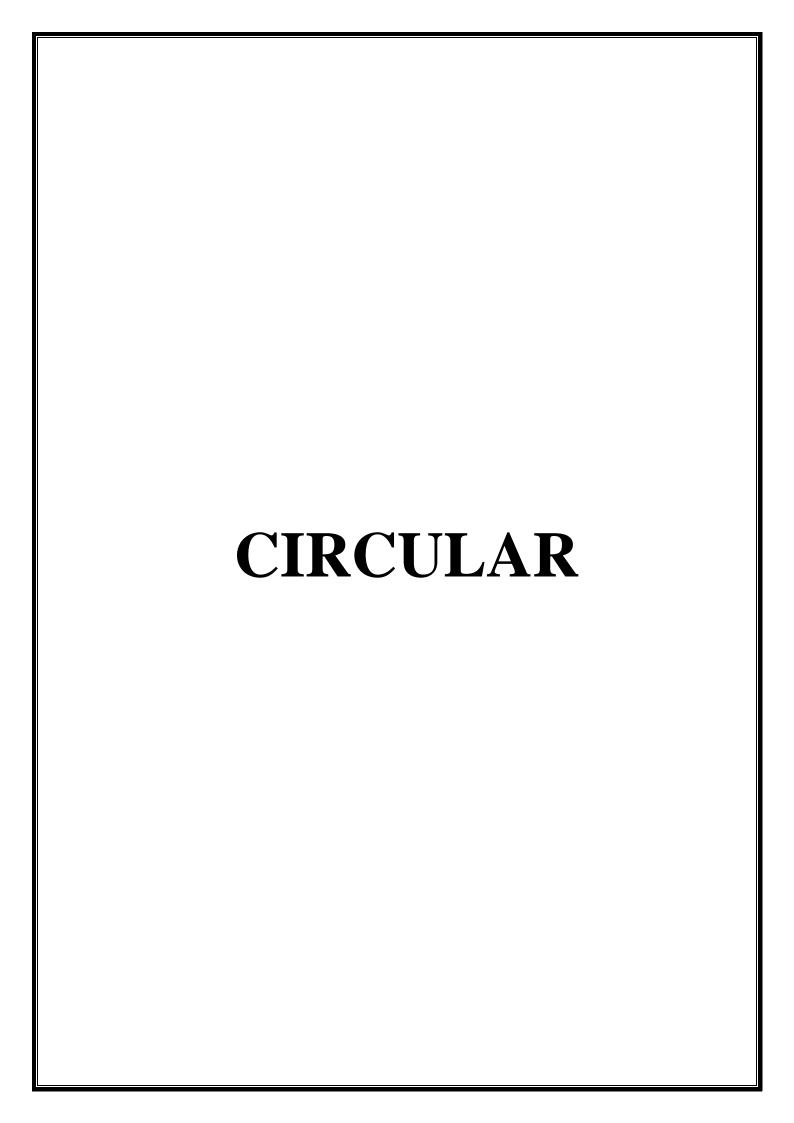
Thanking you, Madam.

Place: Kakinada

Date: 04-02-2022

N.N.S. ES WOOL
Signature of the HOD
DEPT OF COMPUTER SCIENCE
ASDROVIDEGREE CULECEMINATIONOMOUS
KAKINADA

Yours faithfully, (N.Naga Subrahmanyeswari)



A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE CIRCULAR



ညြှီ့ သီထားရှုပြုံသည့် ဓာဝ

Date: 21-02-2022

The Department of Computer Science wishes to organize the Certificate course on "Information Technology Skills" with the duration from 21-02-2022 to 22-04-2022 for all I,II and III Year students to enhance their Computer Skills.

Note:

- Interested students can give their names to Ms. M. Sowjanya, Department of Computer Science and Computer Applications on or before 19-02-2021.
- Timings: 3.00 PM to 4.PM

N. N. S. Eswari
Signature of the HOD
DEPT OF COMPUTER SCIENCE
ASDEDVIDEGRE CLLESEMWHICHOMORS
KAKINADA

A.S.D.GOVT.DEGREE COLLEGE (W.

In-charge of the Department

Principal

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF COMPUTER SCIENCE Activity Register 2021-2022

| Date | 21-02-2022 to 22-04-2022 |
|---|--|
| Conducted through (DRC/JKC/ELF/NCC/NSS/ Departments etc.) | Department of Computer Science |
| Nature of Activity (Seminar/Workshop/Extn. Lecture etc.,) | Certificate Course |
| Title of the Activity | Information Technology Skills |
| Name of the Department/Committee | Computer Science |
| Details of Resource Persons (Name, Designation etc.,) | N.Naga Subrahmanyeswari G.Satya Suneetha K.Surya Lakshmi V.Uma Bhuvaneswari |
| No.of students participated | 26 |
| Brief Report on the activity | To enhance the students learning experience in the College and to bring about a more holistic approach to learning as well as to cultivate and develop the necessary skills. |
| Name of the Lecturers who Planned & conducted the activity | N.Naga Subrahmanyeswari, Lecturer in Computer Science G.Satya Suneetha, Lecturer in Computer Applications |
| Signature of the Dept.In-Charge/ Convener of the Committee | Signature of the HOD DEPT OF COMPUTER SCIENCE ASDEDVIDEGREE COLLEGE MANUFOLIDIOUS KAKINADA |
| Signature of the Principal | PRINCIPAL PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (M. AUTONOMOUS KAKINADA |
| Remarks | |

^{(*} Brief Report of the activity has to be submitted along with evidences(Correspondence, Photographs, Paper Clippings, and Student Feedback etc). A separate record has to be prepared for each Academic year. The College Activity Register shall be with the Principal. All activities have to be recorded and the serial no of the activity has to be mentioned on the report of the activity.)

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC) (Affiliated to Adikavi Nannaya University) Jagannaickpur, Kakinada

DEPARTMENT OF COMPUTER SCIENCE

Certificate Course on "Information Technology Skills"

Course Duration: 45 Hours Course Fee: Rs. 300/-

Eligibility: Any I / II / III Year B.Sc. / B.Com. / B.A. students.

Students Intake: 40

Course Objectives:

➤ To provide participants with a foundational understanding of key concepts and principles in information technology

- To enable the students hardware components commonly used in information technology.
- To enable the students utilize the basic knowledge and skills acquired which assists them in their daily lives.
- ➤ To develop participants competence in managing and manipulating data, including data entry, storage, retrieval and analysis.

Course Outcomes:

After the completion of the course, the student will able to

CO1: Acquire the knowledge on basic computer terminology

CO2: Efficiently learn and use Microsoft Office-Word

CO3: Work with MS-Excel and its applications

CO4: Prepare Power-Point Presentations

CO5: Efficiently use Internet and perform safe surfing

Evaluation Process:

Assessment will be done based on the Periodical Assignments given during the course and a Final Assessment will be done by conducting a test at the end of the course.

Syllabus

Module 1 (5 Hours)

Fundamentals of Computer: Overview of Information Technology, Historical development and evolution of Computers, Block Diagram of Computer, Architecture of Computer, Types of Computers, Input and output devices, Memories, Types of Memories, Types of Software, Programming Languages and its types, Operating Systems and its types.

Module 2 (10 Hours)

MS-Word: Introduction, New Features in Word 2010, The Screen and its Elements, Creating, Saving, Closing, Opening and Editing of a Document-Moving and Coping a Text-Formatting of Text and Paragraph- Bullets and Numbering-Find and Replace - Insertion of objects-Headers and Footers- Page Formatting- Auto Correct Spelling and Grammar, Page Layout, Pictures and Graphics, Tables

Module 3 (10 Hours)

MS- Excel: Introduction, Features of Ms-Excel & Parts of MS-Excel window, Entering and editing data in worksheet, Workbook – Cell - Parts of a window-Saving, Closing, Opening of a Work Book – Editing – Advantages – Types of Functions - Formulas and Functions, Formatting options, Data Filtering, Types of Charts, Macros

Module 4 (10 Hours)

MS- PowerPoint: Introduction, Creating Presentation, Adding New Slides, Adding Text in Boxes, Adding New Text Boxes, Deleting Existing Slide, Rearranging Slides, Adding Slide Notes, Templates Auto Content Wizard-Slide Show-Editing of Presentation

Module 5 (10 Hours)

Fundamentals of Internet: Networking Concepts, Internet and its Services, Browser, Search Engines, Surfing the Internet, Email Creation, Usage of Email



A.S.D GOVERNMENT DEGREE COLLEGE FOR WOMEN(A)



NAAC Re-Accredited With "B" Grade in Cycle-III Affiliated to Adikavi Nannaya University, Rajamahendravaram Kakinada-533 002, Andhra Pradesh

DEPARTMENT OF COMPUTER SCIENCE

A SKILL DEVELOPMENT CERTIFICATE COURSE ON "INFORMATION TECHNOLOGY SKILLS"

HELLO! TECHIE NOVICE.

Excel in the present Digital World by joining this course. Grab the opportunity at your place and utilize it to the fullest and no more be called a Techie Novice.

Register for the Certificate Course on "INFORMATION TECHNOLOGY SKILLS" offered by the Department of Computer Science.

COURSE OBJECTIVES

- Inculcate knowledge on Fundamentals of computer
- Develop Applications in MS-Word
- Implement MS-Excel Applications
- Design the Presentations
- Safe Surfing of Internet

Course Fee
Rs. 300/-

FOR All B.Sc./B.Com./B.A Students

COME ENROLL BECOME EXPERT IN DIGITAL MEDIA





Contact :

N. Naga Subrahmanyeswari
Lecturer in Computer Science
G. Satya Suneetha
Lecturer in Computer Applications



A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC) (Affiliated to Adikavi Nannaya University) Jagannaickpur, Kakinada

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS Certificate Course on "Information Technology Skills"

Duration: 45 Days

Venue: Computer Lab – II

From 21-02-2022 to 22-4-2022

Time : 9:00 AM to 10:00 AM

| From 21-0 | 2-2022 to 22-4-2022 | Time: 9:00 AM to 10:00 AM |
|-----------|--|------------------------------------|
| S.No | Topic | Name of the Faculty |
| 1 | Fundamentals of Computer :Overview of IT | |
| | Historical development and evolution of | |
| 2 | Computers, | |
| 3 | Block Diagram of Computer | Theory: K.Surya Lakshmi |
| 4 | Architecture of Computer | Practical: V. UmaBhuvaneswari |
| 5 | Types of Computers | 1 ractical. v. Olliabiluvalieswali |
| 6 | Input and output devices | |
| 7 | Memories | |
| 8 | Types of Software | |
| 9 | MS-Word: Introduction | |
| 10 | New Features in Word 2007 | |
| 11 | The Screen and its Elements | Th |
| 12 | Creating a New Document | Theory: G.Satya Suneetha |
| 13 | Writing and Simple Formatting | Practical: V.UmaBhuvaneswari |
| 14 | Page Layout | |
| 15 | Pictures and Graphics | |
| 16 | Tables | |
| 17 | MS- Excel: Introduction | |
| | Features of Ms-Excel & Parts of MS-Excel | |
| 18 | window | |
| 19 | Entering and editing data in worksheet | Theory: G.Satya Suneetha |
| 20 | Formulas and Functions | |
| 21 | Formatting options | Practical: V.UmaBhuvaneswari |
| 22 | Data Filtering | |
| 23 | Types of Charts | |
| 24 | Macros | |
| 25 | MS- PowerPoint : Introduction | |
| 26 | Creating Presentation | |
| 27 | Adding New Slides | |
| 28 | Adding Text in Boxes | Theory:N.NagaSubrahmanyeswari |
| 29 | Adding New Text Boxes | Practical: V.UmaBhuvaneswari |
| 30 | Deleting Existing Slide | |
| 31 | Rearranging Slides | |
| 32 | Adding Slide Notes | |
| | Fundamentals of Internet: Networking | |
| 33 | Concepts | |
| 34 | Internet and its Services | |
| 35 | Browser | Theory:N.NagaSubrahmanyeswari |
| 36 | Search Engines | Practical:V.UmaBhuvaneswari |
| 37 | Surfing the Internet | 11ucucui. v.cinabiiuvaneswaii |
| 38 | Email Creation | |
| 39 | Usage of Email | |

A.S.D.GOVT DEGREE COLLEGE FOR WOMEN (A) DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS CERTIFICATE COURSE ON "INFORMATION TECHNOLOGY SKILLS"

Duration: 45 Days (21~02~2022 to 22~04~2022) LIST OF STUDENTS ENROLLED INTO COURSE

| LIST OF STODIATIS EXTROLLED INTO COORSE | | | | |
|---|----------|--------------------------------|-------------------|--|
| S.NO | Regd.No. | NAME | Class | |
| 1 | 11749 | Nedunuri Joshnavi | I BSc (MPC) | |
| 2 | 11846 | Chukka Ramya Sri | I BSc (MPC) | |
| 3 | 11872 | Boddeti Veera Prabha Aswini | I BSc (MPC) | |
| 4 | 11777 | Chekka Malliswari | I BSc (MPC) | |
| 5 | 12029 | Kadupu Aparna | I BSc (MPCs) | |
| 6 | 11906 | Chodisetti Vishnu Sri | I BSc (MPCs) | |
| 7 | 12096 | Padala Kavya Sri Satya | I BSc (MPCs) | |
| 8 | 11930 | Guda Sharon Grace | I BSc (MPCs) | |
| 9 | 11776 | Petta Nikitha | I BSc (MPCs) | |
| 10 | 12176 | Boddu Mounika | I BCom (G) | |
| 11 | 11921 | Kankanala Pavani | I BCom (G) | |
| 12 | 11885 | Baggu Bharathi | I BCom (G) | |
| 13 | 11952 | Karri Bhavani | I BCom (G) | |
| 14 | 11805 | Boddu Ratna Kumari | I BCom (G) | |
| 15 | 11911 | Sangadi Sri Kanya | I BCom (G) | |
| 16 | 11912 | Matcha Swathi | I BCom (G) | |
| 17 | 12137 | Peethala Navya Sri | I BCom (G) | |
| 18 | 12032 | Kadali Renu Sri | I BCom (G) | |
| 19 | 12140 | V. Sai Durga Devi | I BCom (G) | |
| 20 | 12035 | CH. Geetha | I BCom (G) | |
| 21 | 11822 | Pyla Gowri Durga Bhavani | I BA (HEP) | |
| 22 | 12155 | Battula Sindhuja | I BSC (HSC) | |
| 23 | 10849 | Shaik Baseer | III BSC (CBZ) | |
| 24 | 10833 | Shaik Karishma | III BSC (CBZ) | |
| 25 | 11026 | Chakravarthula Devi | III BSC (CBZ) | |
| 26 | 12023 | Mosa Suguna | III BSC (CZ Aqua) | |

Sample Certificate



A.S.D. Govt Degree College for Women (Autonomous)

(NAAC Re-Accredited Institution with 'B' Grade)
(Affiliated to Adikavi Nannaya University)
Jagannaickpur, Kakinada, E.G.Dt. (A.P.)-533002

Certificate Course

Information Technology Skills

CERTIFICATE

| This is to certify that Ms | | of |
|--|------------------------|--|
| has | completed a | 45 - Day Certíficate Course on |
| "INFORMATION TECHNOLOGY SXILLS" | Organized | by the Department of Computer Science, |
| A.S.D. Govt. Degree College for Women (A | utonomous), <u>J</u> a | agannaickpur, Kakinada, from 21 Feb 2022 |
| to 22 Apríl 2022. | | |

N. Naga <u>Subrahmanyeswari</u> Convener & In-Charge G. Satya Suneetha Convener Dr.V.Anantha Lakshmi Principal

1. FUNDAMENTALS OF COMPUTER

1.1 Overview of Information Technology

Definition of a Computer:

A computer is an electronic device that manipulates information, or data. It has the ability to store, retrieve, and process data. You may already know that you can use a computer to type documents, send email, play games, and browse the Web. You can also use it to edit or create spreadsheets, presentations, and even videos. The basic parts of a desktop computer are the computer case, monitor, keyboard, mouse, apnd power cord. Each part plays an important role whenever we use a computer.

1.2 Historical development and evolution of development

The evolution of computer technology builds on the abacus, an ancient calculation device, and the slide rule, an analog computational device. English mathematician Charles Babbage is often called the father of computers because nearly all modern computers rely on the basic ideas that Babbage introduced.

Characteristics and Limitations of Computer

Characteristics:

Speed

Speed means the duration computer system requires in fulfilling a task or completing an activity. It is well-known that computers need very little time than humans in completing a task. Generally, humans take into account a second or minute as a unit of time.

Accuracy

Accuracy means the level of precision with which calculations are made and tasks are performed. One may invest years of his life in detecting errors in computer calculations or updating a wrong record.

Reliability

Reliability is the quality due to which the user can stay dependable on the computer. Computers systems are well-adjusted to do repetitive tasks.

Adaptability

Adaptability of computer system means the quality of it to complete a different type of tasks: simple as well as complex.

Storage

Storage is the ability of the computer to store data in itself for accessing it again in future. Nowadays, apart from having instantaneous access to data, computers have a huge ability to store data in a little physical space.

Limitations of Computer Systems

Limitations are the drawbacks of the computer system in which humans outperform them.

Lack of common-sense

This is one of the major limitations of computer systems. No matter how efficient, fast and reliable computer systems might be but yet do not have any common sense because no full-proof algorithm has been designed to programme logic into them. As computers function based on the stored programme(s), they simply lack common sense.

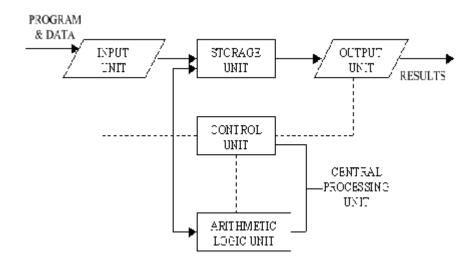
Zero IQ

Another of the limitations of computer systems is that they have zero Intelligence Quotient (IQ).

Lack of Decision-making

Decision-making is a complicated process involving information, knowledge, intelligence, wisdom, and ability to judge. The computer system does not have the ability to make decisions on their own because they do not possess all the essentials of decision-making.

1.3 Block Diagram of a Computer



4 Architecture of a Computer

- **1. Input:** This is the process of entering data and programs in to the computer system. You should know that computer is an electronic machine like any other machine which takes as inputs raw data and performs some processing giving out processed data. Therefore, the input unit takes data from us to the computer in an organized manner for processing.
- **2. Storage:** The process of saving data and instructions permanently is known as storage. Data has to be fed into the system before the actual processing starts. It is because the processing speed of Central Processing Unit (CPU) is so fast that the data has to be provided to CPU with the same speed. Therefore the data is first stored in the storage unit for faster access and processing. This storage unit or the primary storage of the computer system is designed to do the above functionality. It provides space for storing data and instructions.

The storage unit performs the following major functions:

All data and instructions are stored here before and after processing.

• Intermediate results of processing are also stored here.

Processing: The task of performing operations like arithmetic and logical operations is called processing. The Central Processing Unit (CPU) takes data and instructions from the storage unit and makes all sorts of calculations based on the instructions given and the type of data provided. It is then sent back to the storage unit.

Control: The manner how instructions are executed and the above operations are performed. Controlling of all operations like input, processing and output are performed by <u>control unit</u>. It takes care of step by step processing of all operations inside the computer. **Output:** This is the process of

producing results from the data for getting useful <u>information</u>. Similarly the output produced by the computer after processing must also be kept somewhere inside the computer before being given to you in human readable form. Again the output is also stored inside the computer for further processing.

Arithmetic Logical Unit (ALU)

Logical Unit: After you enter data through the input device it is stored in the <u>primary storage unit</u>. The actual processing of the data and instruction are performed by Arithmetic Logical Unit. The major operations performed by the ALU are addition, subtraction, multiplication, division, logic and comparison. Data is transferred to ALU from storage unit when required. After processing the output is returned back to storage unit for further processing or getting stored.

Control Unit (CU)

The next component of computer is the Control Unit, which acts like the supervisor seeing that things are done in proper fashion. Control Unit is responsible for co ordinating various operations using time signal. The control unit determines the sequence in which computer programs and instructions are executed. Things like processing of programs stored in the main memory, interpretation of the instructions and issuing of signals for other units of the computer to execute them. It also acts as a switch board operator when several users access the computer simultaneously. Thereby it coordinates the activities of computer's peripheral equipment as they perform the input and output.

Central Processing Unit (CPU)

The ALU and the CU of a computer system are jointly known as the <u>central processing unit</u>. You may call CPU as the brain of any computer system. It is just like brain that takes all major decisions, makes all sorts of calculations and directs different parts of the computer functions by activating and controlling the operations.

1.5 Types of Computers

Personal Computer:

A single person defines the personal computer, or PC, as any computer designed for general use by one person. While a Mac is a PC, most people relate the term with computers that run the Windows operating system. PCs were first known as microcomputers because they were a complete computer but built on a smaller scale than the huge systems in use by most businesses. Personal computers come in many forms, including the new Apple iPad.

Desktop PC:

that is not designed for portability is a desktop computer. The expectation with desktop systems is that you will set the computer up in a permanent location, like a desk or table. Most desktops offer more power, storage and versatility for less cost than their portable brethren.

Laptop:

Also called notebooks, laptops are portable computers that mix the display, keyboard, a pointing device or trackball, processor, memory and hard drive all in a battery-operated package slightly larger than an average hardcover book. On the left is a picture of Apple CEO Steve Jobs holding up the MacBook Pro Air.

Tablet Computers:

Tablet Computers are ultra--portable computers that are even smaller than traditional laptops. Their low cost means they're cheaper than almost any brand--new laptop you'll find at retail outlets. However, the internal components are less powerful than those in regular laptops. Recent improvements to tablet computers have allowed users to view HD video, get high quality sound, great photo capabilities, and the ability to share information, photos, and videos with anyone.

Smart Phones:

Smart phones are handheld--sized computers that often use flash memory instead of a hard drive for storage. These devices usually do not have keyboards but rely on touch screen technology for user input. Smart phones are typically smaller than a paperback novel, very lightweight with a reasonable battery life. Smartphones have the same capabilities as tablet computers, but also allow users to text or make phone calls.

Workstation:

Another type of computer is a workstation. A workstation is simply a desktop computer that has a more powerful processor, additional memory and enhanced capabilities for performing a special group of task, such as 3D Graphics or game development. They may even use multiple screens to enhance their viewing.

Server:

A computer that has been optimized to provide services to other computers over a network. Servers usually have powerful processors, lots of memory and large hard drives. Servers allow many computers to share a printer or other devices without the cost of having to buy one for every computer. Servers also allow users to share information and files with each other. The computers in this lab are part of a network.

Mainframe:

In the early days of computing, mainframes were huge computers that could fill an entire room or even a whole floor! As the size of computers has diminished while the power has increased, the term mainframe has fallen out of use in favor of enterprise server. You'll still hear the term used, particularly in large companies to describe the huge machines processing millions of transactions every day. Mainframes store vast amounts of information.

Super Computer:

This type of computer usually costs hundreds of thousands or even millions of dollars. Although some supercomputers are single computer systems, most are composed of multiple high performance computers working in parallel as a single system. Super computers are the fastest, most powerful, most expensive computers made today. The best--known supercomputers are built by Cray Super computers. Many of today's great movies use supercomputers for their CGI. They can perform over a trillion calculations per second.

Wearable Computers:

The latest trend in computing is wearable computers. Essentially, common computer applications (e-mail, database, multimedia, calendar/scheduler) are integrated into watches, cell phones, visors and even clothing. Users can use these devices for health and fitness, navigation, social networking, and gaming. Google can now augment a person's vision through special computer glasses. The glasses can

stream information to the lenses and allow the wearer to send and receive messages through voice commands. Th

1.6 Input and Output Devices:

Hardware

<u>Hardware</u> refers to the physical elements of a computer. This is also sometime called the machinery or the equipment of the computer. Examples of hardware in a computer are the keyboard, the monitor, the mouse and the central processing unit. However, most of a computer's hardware cannot be seen; in other words, it is not an external element of the computer, but rather an internal one, surrounded by the computer's casing (tower). A computer's hardware is comprised of many different parts, but perhaps the most important of these is the motherboard. The motherboard is made up of even more parts that power and control the computer.

Software:

<u>Software</u>, commonly known as programs or apps, consists of all the instructions that tell the hardware how to perform a task. These instructions come from a software developer in the form that will be accepted by the *platform* (operating system + CPU) that they are based on. For example, a program that is designed for the Windows operating system will only work for that specific operating system. Compatibility of software will vary as the design of the software and the operating system differ. Software that is designed for Windows XP may experience a compatibility issue when running under Windows 2000 or NT.

Computer case



The **computer case** is the metal and plastic box that **contains the main components** of the computer, including the motherboard, central processing unit (CPU), and power supply. The front of the case usually has an **On/Off button** and one or more **optical drives**. Computer cases come in different shapes and sizes. A **desktop case** lies flat on a desk, and the monitor usually sits on top of it. A **tower case** is tall and sits next to the monitor or on the floor. **All-in-one** computers come with the internal components built into the monitor, which eliminates the need for a separate case.

Monitor

The **monitor** works with a **video card**, located inside the computer case, to display images and text on the screen. Most monitors have **control buttons** that allow you to change your monitor's display settings, and some monitors also have built-in speakers.

Newer monitors usually have **LCD** (liquid crystal display) or **LED** (light-emitting diode) displays. These can be made very thin, and they are often called **flat-panel displays**. Older monitors

use **CRT** (cathode ray tube) displays. CRT monitors are much larger and heavier, and they take up more desk space.

Keyboard

The **keyboard** is one of the main ways to communicate with a computer. There are many different types of keyboards, but most are **very similar** and allow you to accomplish the same basic tasks. Click the buttons in the interactive below to learn about the different parts of the keyboard.



If you want to learn how to type or improve your touch-typing skills, check out our free **Typing Tutorial**.

Mouse

The **mouse** is another important tool for communicating with computers. Commonly known as a **pointing device**, it lets you **point** to objects on the screen, **click** on them, and **move** them.

There are two main mouse types: optical and mechanical. The **optical** mouse uses an electronic eye to detect movement and is easier to clean. The **mechanical mouse** uses a rolling ball to detect movement and requires regular cleaning to work properly.

To learn the basics of using a mouse, check out our interactive **Mouse Tutorial**.

Mouse alternatives:

There are other devices that can do the same thing as a mouse. Many people find them easier to use, and they also require less desk space than a traditional mouse. The most common mouse alternatives are below.

• **Trackball:** A trackball has a ball that can rotate freely. Instead of moving the device like a mouse, you can roll the ball with your thumb to move the pointer.



• **Touchpad:** A touchpad—also called a **trackpad**—is a touch-sensitive pad that lets you control the pointer by making a drawing motion with your finger. Touch pads are common on laptop computers.



Front of a computer case:

Click the buttons in the interactive below to become familiar with the front of a computer.



Back of a computer case

The back of a computer case has **connection ports** that are made to fit **specific devices**. The placement will vary from computer to computer, and many companies have their own special connectors for specific devices. Some of the ports may be **color coded** to help you determine which port is used with a particular device. Click the buttons in the interactive below to become familiar with the back of a computer.



Peripherals used with computer:

The most basic computer setup usually includes the **computer case**, **monitor**, **keyboard**, and **mouse**, but you can plug many different types of devices into the extra ports on your computer. These devices are called **peripherals**. Let's take a look at some of the most common ones.

Printers: A **printer** is used to **print** documents, photos, and anything else that appears on your screen. There are many types of printers, including **inkjet**, **laser**, and **photo** printers. There are even **all-in-one printers**, which can also scan and copy documents.



Scanners: A **scanner** allows you to **copy a physical image or document** and save it to your computer as a **digital (computer-readable)** image. Many scanners are included as part of an all-in-one printer, although you can also buy a separate **flatbed** or **handheld** scanner.

Speakers/headphones: **Speakers** and **headphones** are output devices, which means they send information from the computer to the user—in this case, they allow you to **hear sound and music**. Depending on the model, they may connect to the **audio** port or the **USB** port. Some monitors also have built-in speakers.



Microphones: A **microphone** is a type of input device, or a device that receives information from a user. You can connect a microphone to **record sound** or **talk with someone else** over the Internet. Many laptop computers come with built-in microphones.

Web cameras: A **web camera**—or **webcam**—is a type of input device that can record **videos** and take **pictures**. It can also transmit video over the Internet in **real time**, which allows for **video chat** or **video conferencing**with someone else. Many webcams also include a microphone for this reason.



Game controllers and **joysticks**: A game controller is used to control computer games. There are many other types of controllers you can use, including **joysticks**, although you can also use your **mouse** and **keyboard** to control most games.

Digital cameras: A **digital camera** lets you capture pictures and videos in a digital format. By connecting the camera to your computer's USB port, you can transfer the images from the camera to the computer.

Mobile phones, MP3 players, tablet computers, and other devices: Whenever you buy an electronic device, such as a mobile phone or MP3 player, check to see if it comes with a **USB cable**. If it does, this means you can most likely connect it to your computer.

Inside a computer

Motherboard

The **motherboard** is the computer's **main circuit board**. It's a thin plate that holds the CPU, memory, connectors for the hard drive and optical drives, expansion cards to control the video and audio, and connections to your computer's ports (such as USB ports). The motherboard connects directly or indirectly to every part of the computer.

CPU/processor

The central processing unit (CPU), also called a **processor**, is located inside the **computer case** on the motherboard. It is sometimes called the brain of the computer, and its job is to carry out commands. Whenever you press a key, click the mouse, or start an application, you're sending instructions to the CPU.

The CPU is usually a **two-inch ceramic square** with a **silicon chip** located inside. The chip is usually about the size of a thumbnail. The CPU fits into the motherboard's **CPU socket**, which is covered by the **heat sink**, an object that absorbs heat from the CPU.

A processor's **speed** is measured in **megahertz (MHz)**, or millions of instructions per second; and **gigahertz (GHz)**, or billions of instructions per second. A faster processor can execute instructions more quickly. However, the actual speed of the computer depends on the speed of many different components—not just the processor.

1.7 Memories

RAM (random access memory)



RAM is your system's **short-term memory**. Whenever your computer performs calculations, it temporarily stores the data in the RAM until it is needed.

This **short-term memory disappears** when the computer is turned off. If you're working on a document, spreadsheet, or other type of file, you'll need to **save** it to avoid losing it. When you save a file, the data is written to the **hard drive**, which acts as **long-term storage**.

RAM is measured in **megabytes (MB)** or **gigabytes (GB)**. The **more RAM** you have, the more things your computer can do at the same time. If you don't have enough RAM, you may notice that your computer is sluggish when you have several programs open. Because of this, many people add **extra RAM** to their computers to improve performance.

Hard disk



The **hard drive** is where your software, documents, and other files are stored. The hard drive is **long-term storage**, which means the data is still saved even if you turn the computer off or unplug it.

When you run a program or open a file, the computer copies some of the data from the **hard drive** onto the **RAM**. When you **save** a file, the data is copied back to the **hard drive**. The faster the hard drive, the faster your computer can **start up** and **load programs**.

Expansion cards

Most computers have **expansion slots** on the motherboard that allow you to add various types of **expansion cards**. These are sometimes called **PCI** (**peripheral component interconnect**) **cards**. You may never need to add any PCI cards because most motherboards have built-in video, sound, network, and other capabilities.

However, if you want to boost the performance of your computer or update the capabilities of an older computer, you can always add one or more cards. Below are some of the most common types of expansion cards.

Video card



The video card is responsible for what you see on the monitor. Most computers have a GPU (graphics processing unit) built into the motherboard instead of having a separate video card. If you like playing graphics-intensive games, you can add a faster video card to one of the expansion slots to get better performance.

A.S.D.GOVT DEGREE COLLEGE FOR WOMEN (A) DEPARTMENT OF COMPUTER SCIENCE

Certificate Course on "Information Technology Skills"

| | of the Student: | Date: 2 | 22-04-2 | 022 |
|-------|--|-----------|---------|-----|
| Class | : | | | |
| Regd. | No : | | | |
| | | | | |
| 1. | Who is the father of personal computer? | | [|] |
| | a. Edward Robert | | | |
| | b. Allen Turing | | | |
| | c. Charles Babbage | | | |
| _ | d. None of these | | _ | |
| 2. | To record and produce sound in a computer system you need | | [|] |
| | a. Microphone | | | |
| | b. Speakers | | | |
| | c. Sound card | | | |
| _ | d. All of above | | - | - |
| 3. | The temporary output of a computer system is called | | [|] |
| | a. Hardcopy output | | | |
| | b. Softcopy output | | | |
| | c. Computer Printout | | | |
| | d. None of above | | - | - |
| 4. | Which device in microprocessor stores the data to be processed | 1? | [|] |
| | a. ROM | | | |
| | b. RAM | | | |
| | c. Registers | | | |
| _ | d. ALU | | - | - |
| 5. | Which of the following is not a magnetic storage medium? | | [|] |
| | a. Floppy Disk | | | |
| | b. Hard Disk | | | |
| | c. Digital Versatile Disks | | | |
| | d. Cassettes and Cartridges | | | - |
| 6. | A kind of memory chip that stores data and instructions perma | anently i | is[|] |
| | a. ROM | | | |
| | b. SRAM | | | |
| | c. EEPROM | | | |
| _ | d. RAM | | _ | |
| 7. | 8 | | [|] |
| | a. EPROM | | | |
| | b. EEPROM | | | |
| | c. EAPROM | | | |
| 0 | d. DRAM | | - | - |
| 8. | ALU stands for | | [|] |
| | a. Arithmetic and Logical Unit. | | | |
| | b. Auxiliary and Logical Unit | | | |
| | c. Arithmetic and Link Unit | | | |
| ^ | d. None of the above | | - | , |
| 9. | is a volatile memory | | [|] |
| | a. ROM | | | |
| | b. RAM | | | |
| | c. EEPROM | | | |

| c. Fill Style d. Fill Back | | | |
|--|---------|-----------|---------|
| 21. What is the intersection of a column and a row on a worksheet called | 1?[|] | |
| a. Column | | | |
| b. Value | | | |
| c. Address | | | |
| d. Cell | | | |
| 22. What type of chart is useful for comparing values over catego | ries? | [| 1 |
| a. Pie Chart | | - | - |
| b. Column Chart | | | |
| c. Line Chart | | | |
| d. Dot Graph | | | |
| 23. Which function in Excel tells how many numeric entries are t | here? | Γ | 1 |
| a. NUM | | - | - |
| b. COUNT | | | |
| c. SUM | | | |
| d. CHKNUM | | | |
| 24. Which one is not a Function in MS Excel? | [|] | |
| a. SUM | L | 1 | |
| b. AVG | | | |
| c. MAX | | | |
| d. MIN | | | |
| 25. Functions in MS Excel must begin with | [|] | |
| a. An () sign | L | 1 | |
| b. An Equal Sign | | | |
| c. A Plus Sign | | | |
| d. A > Sign | | | |
| 26. In Excel, Columns are labelled as | | Г | 1 |
| a. A, B, C, etc | | L | J |
| | | | |
| b. 1,2,3 etc | | | |
| c. A1, A2, etc. | | | |
| d. \$A\$1, \$A\$2, etc. | | . andan : | i a |
| 27. The process of arrenging the items of a column in some seque | ence or | order | IS r |
| known as: | | | L |
| , <u> </u> | | | |
| a. Arrengin | | | |
| b. Autofill | | | |
| c. Sorting | | | |
| d. Filtering | | - | - |
| 28. What type of chart is useful for comparing parts of a whole? | | L |] |
| a. Pie Chart | | | |
| b. Column Chart | | | |
| c. Line Chart | | | |
| d. Dot Graph | - | - | |
| 29. What do you use to create a chart? | [|] | |
| a. Pie Wizard | | | |
| b. Excel Wizard | | | |
| c. Data Wizard | | | |
| d. Chart Wizard | | | |
| 30. How many sheets are there, by default, when we create a new | / Excel | file?[|] |
| a. 1 | | | |
| b. 3 | | | |
| c. 5 | | | |
| d. 6 | _ | _ | |
| 31. How to Open a presentation in PowerPoint? | [|] | |

| a. Ctrl + K | | | |
|---|---|---|--|
| b. Ctrl + O | | | |
| c. Ctrl+ A | | | |
| d. None of these | | | |
| 32. How to create a new presentation in PowerPoint? | [|] | |
| a. Ctrl + N | - | - | |
| b. Ctrl + M | | | |
| c. Ctrl+ S | | | |
| d. None of these | | | |
| 33. How to save a presentation in PowerPoint? | [|] | |
| a. Ctrl + N | L | 1 | |
| b. Ctrl + M | | | |
| c. Ctrl+ S | | | |
| d. None of these | | | |
| 34. How to print a presentation in PowerPoint? | [|] | |
| a. Ctrl+ P | L | 1 | |
| b. Ctrl+ O | | | |
| c. Ctrl+ S | | | |
| d. None of these | | | |
| | г | 1 | |
| 35. How to go to next slide in PowerPoint? | |] | |
| a. Tab | | | |
| b. Next key arrow | | | |
| c. Spacebar | | | |
| d. None of these | r | , | |
| 36. Which key is used for Help in PowerPoint? | [|] | |
| a. F1 | | | |
| b. F2 | | | |
| c. F3 | | | |
| d. None of These | | | |
| 37. How to cut text in presentation in PowerPoint? | [|] | |
| a. Ctrl+C | | | |
| b. Ctrl+X | | | |
| c. Ctrl+L | | | |
| d. None of These | | | |
| 38. To end the Slide show in PowerPoint: | [|] | |
| a. Esc | | | |
| b. End | | | |
| c. Delete | | | |
| d. None of these | | | |
| 39. Which keys are used to find in PowerPoint? | [|] | |
| a. Ctrl+I | | | |
| b. Ctrl+E | | | |
| c. Ctrl+F | | | |
| d. None of These | | | |
| 40. To Justify the text in PowerPoint: | [|] | |
| a. Ctrl+ L | | | |
| b. Ctrl+ E | | | |
| c. Ctrl + J | | | |
| d. None of these | | | |
| 41. Which of these is the easiest way of communication? | [|] | |
| a. E-mail | | | |
| b. Telephone | | | |
| c. Fax | | | |
| d. Letter | | | |
| 42. Search engine are used to | [|] | |
| | | - | |

| a. Search Videos | | |
|---|---------|------------|
| b. Search Documents | | |
| c. Software system that is designed to search for information on th | e World | l Wide Web |
| d. All of these | | |
| 43. Search Engines are able to search type of information. | [|] |
| a. Documents | _ | _ |
| b. Images | | |
| c. Videos | | |
| d. All of these | | |
| 44. Search Engines maintain heavy database of keywords and urls! | [|] |
| a. True | | |
| b. False | | |
| 45. E-Mail address is made up of | [|] |
| a. Two parts | | |
| b. Single part | | |
| c. Three parts | | |
| d. None of these | | |
| 46. Google is a search engine | [|] |
| a. True | _ | _ |
| b. False | | |
| 47. Search engine which is most popular in India is | [|] |
| a. yahoo | | |
| b. bing | | |
| c. google | | |
| d. baidu | | |
| 48. Computer understands only | [|] |
| a. Binary Language | | |
| b. High level Language | | |
| c. Assembly Language | | |
| d. None of these | | |
| 49. The smallest unit of data in computer is | [|] |
| a. Byte | | |
| b. Nibble | | |
| c. Bit | | |
| d. KB | | |
| 50. The two basic types of memory in a computer are | [|] |
| a. Primary and major | | |
| b. Primary and Secondary | | |
| c. Minor and Major | | |
| d. Main and virtual | | |
| | | |
| | | |



Distribution of Course Completion Certificates to the students