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

Jagannaickpur, Kakinada

DEPARTMENT OF COMPUTER SCIENCE
<u>Activity Register 2018-2019</u>

Date	14/06/2018 to 22/06/2018
Conducted through (DRC/JKC/ELF/NCC/NSS/Department etc.,)	Department of Computer Science
Nature of Activity (seminar/workshop/exten Lecture etc)	**BRIDGE COURSE**-- I B.Sc (M.P.Cs)
Title of the Activity	**Computer Fundamentals**
Name of the Department/ Committee	**Department of Computer Science**
Details of Resourc persons (Name, Designation etc.,)	N.Naga Subrahmanyeswari **M.Tech.,(Ph.D).** Lecturer in Computer Science
No. of students participated	40
Brief Report on the activity	To get them acquainted with the subject, a five days programme is being held. (separate sheet enclosed)
Name of the Lecturers who planned & conducted the activity	N.Naga Subrahmanyeswari **M.Tech.,(Ph.D).** Lecturer in Computer Science
Signature of the Department In-charge/ Convener of the Committee	N.N.S.Eswari Signature of the HOD IN. HARGE DEPT OF COMPUTER SCIENCE ASDGOVT DEGREE COLLEGE (W)(AUTONOMOUS) KAKINADA
Signature of the Principal	H. Suvarchala PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (W) AUTONOMOUS KAKINADA
Remarks	

BRIDGE COURSE

The Department of Computers takes up a Bridge course for I B.Sc (M.P.Cs) students who did not read Computers as their subject at their intermediate level. To get them acquainted with the subject, a Six-day programme is being held where in the total introduction of the syllabus is covered and there by the student can rise up to a level to understand the subject.

OBJECTIVIES:

- To be able to learn the Computer terms
- To be able to get a overall view of the subject
- To be able to understand the weightage of the subject in competitive examinations

I B.Sc(M.P.Cs) 2018-2019

COMPUTERS BRIDGE COURSE ATTENDANCE

S.NO	Name of the Student	14/06/18	15/06/18	18/06/18	19/06/18	21/06/18	22/06/18
1.	PABBINEEDI VENKATA RAMA DEVI	P	P	P	P	P	P
2.	KANTUMUTCHU SARITHA	P	P	P	P	P	P
3.	SAMMANGI HARITHA	P	P	P	P	P	P
4.	CHEKKA NAGA DEVI	P	P	P	P	P	P
5.	PABBINEEDI DEVI	P	P	P	P	P	P
6.	KADIRI MOUNIKA	P	P	A	P	P	P
7.	PENDEM JYOTHI	P	P	P	P	P	P
8.	DUVVAPU SURYAKUMARI	P	P	P	P	P	P
9.	MEESALA ALEKHYA	P	P	P	P	A	P
10.	KADARI PRAVALLIKA	P	P	P	P	P	P
11.	TILLAPUDI TEJASWINI	P	P	P	P	P	P
12.	SK.HABEEBA KHATHUN	P	P	P	P	P	P
13.	DONAM ROSHINI	P	P	P	P	P	P
14.	MEDISETTI JEEVA	P	P	P	P	P	P
15.	KUSUME SOWMYA CHANDRIKA	P	P	P	P	P	P
16.	THOTA POOJITHA	P	P	A	P	P	P
17.	PINAPOTHU VENI	P	P	P	P	P	P
18.	PEPAKAYALA THANUJA	P	P	P	P	P	P
19.	DOMA SRIDEVI PRIYANKA	P	P	P	P	P	P
20.	ADAPA JAYA LAKSHMI	P	P	P	P	P	P
21.	PABBINEEDI VENKATA RAMA DEVI	P	P	P	P	P	P
22.	KANTUMUTCHU SARITHA	P	P	P	P	P	P
23.	SARAMALLA PADMARANI	P	P	P	P	P	P
24.	GULLAPUDI LAKSHMI NAGA DURGA MADHU SREE	A	P	P	P	P	P
25.	MUMMIDI KAMAKSHI DEVI	P	P	P	P	P	P

#	Name						
26.	KARRI SRI VENKATA SESHA LAVANYA	P	P	P	P	P	P
27.	VASAMSETTI ROOPA DEVI	P	P	P	P	P	A
28.	GANGULA NAGASAI	P	P	P	P	P	P
29.	PAMPANA LAKSHMI JYOTHI	P	P	P	P	P	P
30.	DASARI KOMALATHA	P	P	P	P	P	P
31.	KOKKILIGADDA AHALYA	A	P	P	P	P	P
32.	SHAIK JASMIN BEGUM	P	P	A	P	P	P
33.	NEETHIPUDI CHANDINI	P	P	P	P	P	P
34.	RAYADU RAMYA ANUSHA	P	P	P	P	P	P
35.	DARAPU SUSHMA	P	P	P	A	P	P
36.	PALEPU GANGA BHAVANI	P	P	P	P	P	P
37.	KONAGALLA SUPRAJA	P	P	P	P	P	P
38.	SUNDAM SAI KUMARI	P	P	P	P	P	P
39.	MAHADASU NIHARIKA	P	P	P	P	P	P
40.	JINNALA SRIKANYA	P	A	P	P	P	P

N. N. S. Eswari
Signature of the HOD
IN - CHARGE
DEPT OF COMPUTER SCIENCE
ASD GOVT DEGREE COLLEGE (W) AUTONOMOUS
KAKINADA

A.S.D.GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
COMPUTER FUNDAMENTALS

I B.Sc (M.P.Cs) BRIDGE COURSE 2018-2019

S.NO	DATE	SYLLABUS
01	**14/06/18** **Thursday**	❖ INTERDUCION TO COMPUTERS
02	**15/06/18** **Friday**	❖ HARD WARE & SOFTWARE
03	**18/06/18** **Monday**	❖ COMPONETS OF A COMPUTER
04	**19/06/18** **Wednesday**	❖ PERIPHERALS
05	**21/06/18** **Friday**	❖ TYPES OF COMPUTERS
06	**22/06/18** **Saturday**	❖ OPERATING SYSTEM

N.N.S.Eswari
Signature of the HOD
IN - HARGE
DEPT OF COMPUTER SCIENCE
ASDGOVT DEGREE COLLEGE (W)(AUTONOMOUS)
KAKINADA

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

శ్రీ విద్యా ప్రవర్ధతాం

BRIDGE COURSE TIME TABLE

I B.Sc(M.P.Cs)

2018-2019

DAY	TIMINGS
14/06/18	9AM-10AM CF
15/06/18	CF
18/06/18	CF
19/06/18	CF
21/06/18	CF
22/06/18	CF

N. N. S. Eswari
Signature of the HOD
N. HARGE
DEPT OF COMPUTER SCIENCE
ASDGOVT DEGREE COLLEGE (W) AUTONOMOUS
KAKINADA

INTRODUCTION TO COMPUTERS

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, and power cord. Each part plays an important role whenever we use a computer.

Hardware

Hardware 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:

Software, 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.

Steps to Start and Shut Down a Computer

Buttons and Ports on a Computer

Each computer is different, so the buttons, ports, and sockets will vary from computer to computer. However, there are certain ones you can expect to find on most desktop computers. Learning how these ports are used will help whenever you need to connect something to your computer, like a new printer, keyboard, or mouse.

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 uses 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 conferencingwith 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.
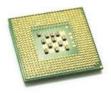
Inside a computer

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.

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 drive

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**.

Power supply unit

The power supply unit in a computer **converts the power** from the wall outlet to the type of power needed by the computer. It sends power through cables to the motherboard and other components.

If you decide to open the computer case and take a look, make sure to **unplug** the computer first. Before touching the inside of the computer, you should touch a grounded metal object—or a metal part of the computer casing—to discharge any static buildup. Static electricity can be transmitted through the computer circuits, which can seriously damage your machine.

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.

Sound card

The **sound card**—also called an audio card—is responsible for **what you hear** in the speakers or headphones. Most motherboards have integrated sound, but you can upgrade to a dedicated sound card for higher-quality sound.

Network card

The **network card** allows your computer to communicate over a network and access the Internet. It can either connect with an **Ethernet** cable or through a **wireless** connection (often called **Wi-Fi**). Many motherboards have built-in network connections, and a network card can also be added to an expansion slot.