#### **COMPUTER DAY**

Computer is a programmed device with a group of instructions to perform specific tasks and generate results at a really high speed. A Computer is a machine that can solve difficult and different problems, process data, store & retrieve data and perform calculations faster and accurately as compared from humans.

The literal meaning of computer may be a device which will calculate.

However, modern computers can do tons quite calculate. Computer can be defined as a machine which receives input stores it and then process the stored data as per the instructions given by the user of the computer and finally gives the output as required.



- Derived from Dictionary word means "to calculate"
- An Electronic Machine
- Takes data as Input
- Stores data
- Process data
- Generates Information as Output

- Computer is an machine that's designed to figure with Information.
- The term computer springs from the Latin term 'computare', this suggests to calculate or programmable machine.
- Computer can not do anything without a Program.
- The Word 'Computer' means to the middle Processor Unit plus Internal memory.

#### • COMPUTER DAY: QUOTES

- "I think it's fair to say that personal computers have become the most empowering tool we've ever created. They're tools of communication, they're tools of creativity, and they can be shaped by their user." -Bill Gates
- "The internet could be a very positive step towards education, organisation and participation in a meaningful society." -Noam Chomsky
- "The good news about computers is that they do what you tell them to do. The bad news is that they do what you tell them to do." -Ted Nelson
- "Access to computers and the Internet has become a basic need for education in our society." -Kent Conrad
- "Computing is not about computers any more. It is about living." -Nicholas Negroponte
- "I do not fear computers. I fear lack of them." -Isaac Asimov

# **Advantages of Computer:**

# Multitasking Multitasking –

Multitasking Multitasking is one among the main advantage of computer. Person can do multiple task, multiple operation at a same time, calculate numerical problems within few seconds. Computer can perform millions or trillions of work in one second.

#### Speed –

Now computer isn't just a calculating device. Now a day's computer has vital role in human life. One of the most advantages of computer is its incredible speed, which helps human to finish their task in few seconds.

#### Cost/ Stores huge -

Amount of knowledge it's a coffee cost solution. Person can save huge data within a coffee budget. Centralized database of storing information is that the major advantage which will reduce cost.

#### Accuracy -

One among the basis advantage of computer is which will perform not only calculations but also with accuracy.

#### Data Security -

Protecting digital data is understood as data security.

# Task completer -

Completes tasks that might be impossible for humans to complete.

#### **Communication** –

Computer helps the user in better understanding and communication with the other devices.

#### Productivity -

The level of productivity gets automatically doubled as the computer can done the work at very fast.

#### Reduces work load -

Information is often accessed by more than one person with the necessity for work to be duplicated.

# Reliability -

Computers can perform same sort of work repeatedly without throwing up errors thanks to tiredness or boredom, which are quite common among humans.

#### Storage -

The pc has an in-built memory where it can store an outsized amount of knowledge . You can also store data in auxiliary storage devices.

#### **Disadvantages of computer:**

# Virus and hacking attacks -

Virus may be a worm and hacking is just an unauthorized access over computer for a few illicit purpose. Virus can go to other system from email attachment, viewing an infected website advertisement, through removable device like USB etc.

#### **Online Cyber Crimes –**

Online cyber-crime means computer and network may have utilized in order to commit crime. Cyberstalking and fraud are the points which comes under online cyber-crimes.

# **Reduction employed opportunity –**

Mainly past generation wasn't used of the pc or they need the knowledge of computer they faced an enormous problem when computer came in field.

# High cost –

Computers are expensive. Even the foremost affordable computers are still very expensive for the typical person in South Africa. Since computers empower people.

#### Distractions/disruptions -

If you've got ever spent hours browsing the web or watching videos on YouTube, then you recognize how distracting computers can be! Because of their high entertainment value.

# Increases waste and impacts the environment –

With the speed that computers and other electronics get replaced, all of the old devices that get thrown away have a big impact on the environment.

# **Goals of Computer Day**

#### 1. Develop problem-solving skills:

Think logically, computationally, and creatively to solve problems. Identify and analyze a problem, design a solution algorithm as a systematic way of processing the necessary information to produce the required output, and implement the solution as a computer program.

# 2. Become proficient in programming:

Understand and master the fundamental constructs and styles of programming. Effectively develop, test, and debug a program using various software tools.

# 3. Attain an in-depth knowledge in computing systems:

Gain the fundamental understanding of topics in computing systems such as programming language paradigms, operating systems, computer networks, and high-performance computing, and the interdependencies among these topics. Become familiar with the interface between hardware and software at the various levels.

#### 4. Understand the fundamental principles of computing:

Grasp the theoretical foundations of computation such as logic and discrete mathematics, formal models of computation, and complexity analysis of algorithms.

#### 5. Cultivate general intellectual skills in liberal arts education in relation to computing:

Strengthen students' ability to communicate effectively, both orally and in written form.

Develop an awareness of ethical and social impacts related to software and hardware. Gain the ability to engage in lifelong learning in the field of computing or any field that they may choose to enter.

#### 6. Gain a broad exposure to topics in computing and its related disciplines:

Computer Science students should acquire an in-depth knowledge of a wide range of computer science topics. Attain knowledge of the overall scope of the computing field and its subfields, and the emerging technologies in computing.

Interdisciplinary Computing majors must understand the basic foundations of their coordinate discipline and discover ways to solve problems in their chosen fields of study using various types of computing systems.

# **Significance of Computer Day:**

- To promote awareness about the computer and to encourage students to use them efficiently.
- This day is intended to encourage the development of technological skills, particularly among students.
- The Computer Day aims to inspire them to learn more and make their work/task easier by the use of computers.
- "Create awareness and drive digital literacy".
- The day is also directed at improving the teaching of Information Technology.

# **Activities Performed on Computer Day:**

- 1. Power Point Presentation
- 2. Games in 'C' programming
- 3.Quiz on Identification of Peripherals using Kahoot and Mentimeter.
- 4. Activity based/Group/Discussion based Learning on Emerging Technologies
- 5. Mock Aptitude Test using Google Forms
- 6. Poster Presentation
- 7. Introduction to IOT using Raspberry Pi Kit.

#### 1. Power Point Presentation

A presentation on MS office is given and report submitted which is enclosed below.

#### **Introduction to MS Office**

Microsoft Office (or simply Office) is a family of server software, and services developed by Microsoft. It was first announced by Bill Gates on August 1, 1988, in Las Vegas. The first version of Office contained Microsoft Word, Microsoft Excel, and Microsoft PowerPoint. Over the years, Office applications have grown substantially closer with shared features such as a common spell checker, data integration etc. Office is produced in several versions targeted towards different end-users and computing environments. The original, and most widely used version, is the desktop version, available for PCs running the Windows, Linux and MacOS operating systems. Office Online is a version of the software that runs within a web browser, while Microsoft also maintains Office apps for Android and iOS.

Microsoft Office is a suite of desktop productivity applications that is designed specifically to be used for office or business use. It is a proprietary product of Microsoft Corporation and was first released in 1990. Microsoft Office is available in 35 different languages and is supported by Windows, Mac and most Linux variants. It mainly consists of Word, Excel, PowerPoint, Access, OneNote, Outlook and Publisher applications.

Microsoft Office was primarily created to automate the manual office work with a collection of purpose-built applications.

Each of the applications in Microsoft Office serves as specific knowledge or office domain such as:

- 1. **Microsoft Word**: Helps users in creating text documents.
- 2. Microsoft Excel: Creates simple to complex data/numerical spreadsheets.
- 3. **Microsoft PowerPoint**: Stand-alone application for creating professional multimedia presentations.
- 4. Microsoft Access: Database management application.
- 5. **Microsoft Publisher**: Introductory application for creating and publishing marketing materials.
- 6. **Microsoft OneNote**: Alternate to a paper notebook, it enables an user to neatly organize their notes.

Besides desktop applications, Microsoft Office is available to use online or from cloud under a lighter (Office Web Apps) and full (Office 365) version. As of 2016, Microsoft Office 2016 is the latest version, available in 4 different variants including Office Home Student 2016, Office Home Business 2016 and Office Professional 2 and the online/cloud Office 365 Home Premium.

# **Important Features of Ms-Word**

Ms-Word not only supports word processing features but also DTP features. Some of the important features of Ms-Word are listed below:

- i) Using word you can create the document and edit them later, as and when required, by adding more text, modifying the existing text, deleting/moving some part of it.
- ii) Changing the size of the margins can reformat complete document or part of text.
- iii) Font size and type of fonts can also be changed. Page numbers and Header and Footer can be included.
- iv) Spelling can be checked and correction can be made automatically in the entire document. Word count and other statistics can be generated.

- v) Text can be formatted in columnar style as we see in the newspaper. Text boxes can be made.
- vi) Tables can be made and included in the text.
- vii) Word also allows the user to mix the graphical pictures with the text. Graphical pictures can either be created in word itself or can be imported from outside like from Clip Art Gallery.
- viii) Word also has the facility of macros. Macros can be either attached to some function/special keys or to a tool bar or to a menu.
- ix) It also provides online help of any option.

#### **Introduction to Ms-Power Point**

A PowerPoint presentation is a presentation created using Microsoft PowerPoint software. The presentation is a collection of individual slides that contain information on a topic. PowerPoint presentations are commonly used in business meetings and for training and educational purposes. Microsoft PowerPoint is a software product used to perform computer-based presentations. There are various circumstances in which a presentation is made: teaching a class, introducing a product to sell, explaining an organizational structure, etc. The preparation and the actual delivery of each are quite different. PowerPoint typically comes with a set of preloaded themes for you to choose from. These can range from simple color changes to complete format layouts with accompanying font text. Themes can be applied through the whole presentation or a single slide. Using the page setup allows you to optimize the presentation for the display size; for instance, you should use a larger screen ratio when displaying on a projector compared to a computer screen.

#### **Features**

PowerPoint software features and formatting options include a wizard that walks you through the presentation creation process. Design templates---prepackaged background designs and font styles that will be applied to all slides in a presentation. When viewing a presentation, slide progression can be manual, using the computer mouse or keyboard to progress to the next slide, or slides can be set up to progress after a specified length of time. Slide introductions and transitions can be added to the slides.

#### **Introduction to Ms-Excel**

Microsoft Excel is a general-purpose electronic spreadsheet used to organize, calculate, and analyse data. The task you can complete with Excel ranges from preparing a simple family budget, preparing a purchase order, or managing a complex accounting ledger for a medium size business.

#### **Excel Features**

There are a number of features that are available in Excel to make your task easier. Some of the main features are:

- 1. AutoFormat lets you to choose many present table formatting options.
- 2. AutoSum helps you to add the contents of a cluster of adjacent cells.
- 3. List AutoFill automatically extends cell formatting when a new item is added to the end of a list.
- 4. AutoShapes toolbar- will allow you to draw a number of geometrical shapes, arrows, flowchart elements, stars and more. With these shapes you can draw your own graphs.
- 5. Drag and Drop feature will help you to reposition the data and text by simply dragging the data with the help of mouse.
- 6. Charts features will help you in presenting a graphical representation of your data in the form of Pie, Bar, Line charts and more.
- 7. PivotTable flips and sums data in seconds and allows you to perform data analysis and generating reports like periodic financial statements, statistical reports, etc. You can also analyse complex data relationships graphically.
- 8. Shortcut Menus commands that are appropriate to the task that you are doing appear by clicking the right mouse button.

# 2. Games in 'C' programming

Learn C by writing a simple game

This "guess the number" game is a great introductory program when learning a new programming language. Here's how to write it in C.

What's great about a "Guess the number" game is that it exercises several programming concepts: how to use variables, how to compare values, how to print output, and how to read input.

Pick a random number

Start the "Guess the number" game by writing a function to pick a random number. When writing functions, good programmers try to make them flexible, so they can reuse them to solve slightly different problems. So, instead of hard-coding the function to pick a random number between 1 and

100, write the function to pick a random number between 1 and some integer value maxval:

```
#include <stdio.h>
#include <sys/random.h>

int
randnum(int maxval)
{
    /* pick a random number from 1 to maxval */
    int randval;

getrandom(&randval, sizeof(int), GRND_NONBLOCK);

/* could be negative, so ensure it's positive */

if (randval < 0) {
    return (-1 * randval % maxval + 1);
    }

else {
    return (randval % maxval + 1);
    }
}</pre>
```

```
#include <stdio.h>
#include <sys/random.h>

int
randnum(int maxval)
{
    ...
}

int
main(void)
{
    int number;
    int guess;
    number = randnum(100);

    puts("Guess a number between 1 and 100");

    do {
        scanf("%d", &guess);
        if (guess < number) {</pre>
```

```
puts("Too low");
}
else if (guess > number) {
   puts("Too high");
}
while (guess != number);

puts("That's right!");

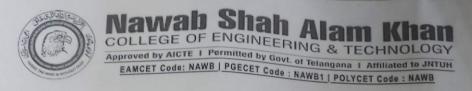
return 0;
}
```

The program starts by picking a random number between 1 and 100 using the randnum function. After printing a prompt to the user, the program enters a do-while loop so the user can guess the number.

In each iteration of the loop, the program tests the user's guess. If the user's guess is less than the random number, the program prints "Too low," and if the guess is greater than the random number, the program prints "Too high." The loop continues until the user's guess is the same as the random number.

When the loop exits, the program prints "That's right!" and then immediately ends.

```
Guess a number between 1 and 100
50
Too high
30
Too low
40
Too low
45
Too high
42
Too low
43
Too low
44
That's right!
```



# Department of Computer Science and Engineering

# CIRCULAR

Date:19.3.2019

All the students of CSE department are hereby informed that the department is going to conduct the "COMPUTER DAY" on 20-03-2019(Wednesday).

Hence all are requested to get your laptops, the class work will be going to run on computers.

Note: All are requested to install Team Viewer.

HOD

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#### At the end students were able to

- 1.demonstrate understanding of the basic operations of a computer system;
- 2. explain the principles of operations for computer systems used in a particular application, specifically in terms of the systems' hardware and software components;
- 3. use computer terminology correctly in the context of a particular application;
- 4. use computer applications software to solve problems;
- 5. discuss and comment on the social impact of the widespread use of computer technology;
- 6. automate simple tasks in specific applications.
- 7. To provide opportunity for the study of modern methods of information processing and its applications;
- 8. To acquaint students with knowledge of the computer systems with

emphasis on their uses and limitation;

- 9. To develop among students the programming techniques and the problem-solving skills through programming;
- 10. To foster among students an interest and confidence in using computers;
- 11. To encourage an understanding of the implications of computers in the modern world:
- 12. To prepare students who wish to go on to further studies in computer science and related subjects.
- 13. show an awareness of what the major computer components are and how they act as system;
- 14. appreciate that computers need instructions to operate and acquire simple programming skills;
- 15. demonstrate a knowledge and understanding of using computers to solve problems related to practical applications;
- 16. show a sense of control over computers;
- 17. show an awareness of the effects and impacts of computers on the individual and the society;
- 18. show an awareness of the capability and limitations of computers;
- 19. show positive attitudes for adapting to and coping with a changing society with widespread utilization of computers.