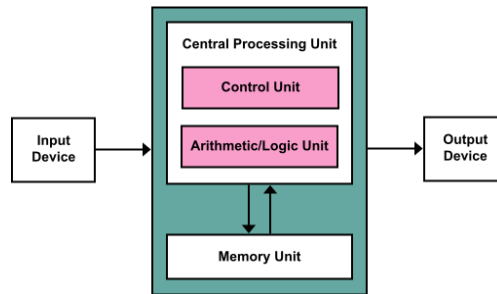


## ASSIGNMENT 1: Fundamentals of IT & Programming

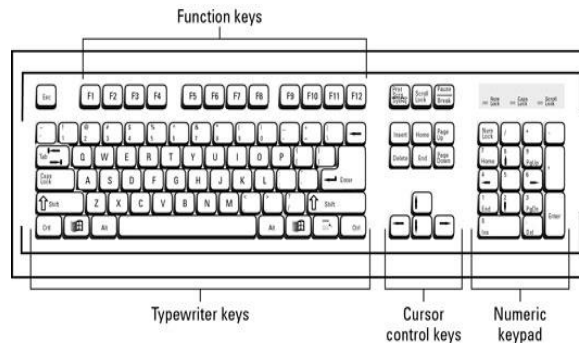
Submitted by – Narendra Mairembam

Q1. Answer:

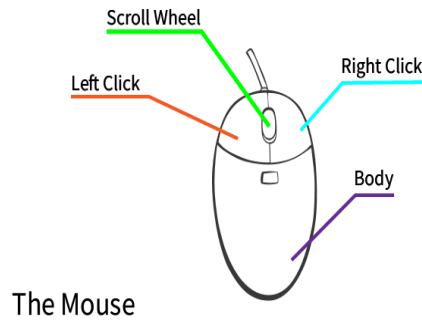
- (a) CPU – It is the electronic circuitry within a computer that carries out the instructions of a computer program by performing the basic arithmetic, logical, control and input or output operations specified by the instructions. It is also called a central processor, main processor or just processor, is the electronic circuitry that executes instructions comprising a computer program.



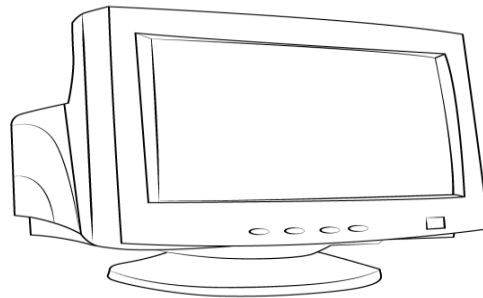
- (b) Keyboard – It is a peripheral input device which uses an arrangement of buttons or keys to act as mechanical level or electronic switches. Keyboard keys typically have a set of characters engraved or printed on them and each pair of key typically corresponds to a single written symbol. Keyboard is used as a text entry interface for typing text, numbers and symbols into application software such as a word processor, web browser or social media.



- (c) Mouse – A computer mouse is a hand-held pointing device that detects two dimensional motion relative to a surface. This motion is typically translated into the motion of a pointer on a display. Which allows a smooth control of the Graphical User Interface (GUI) of a computer. Computer mouse have one or more buttons to allow operation such as the selection of menu item on a display. Mouse often also features other elements, such as touch surfaces and scroll wheels, which enables additional control and dimensional input.



(d) Monitor – Monitor is an output device that display information in pictorial or text form. A monitor usually comprises a visual display, some circuitry, a casing and a power supply. Monitors are connected to all the computers via VGA, Digital Visual Interface (DVI), HDMI, DisplayPort, USB-C, Low-voltage Differential Signaling (LVDS) or other proprietary connectors and signals.



Q2.

Ans. Base on size capacity, computer are classified as follows –

1. **1.Super Computer:** These computers have thousands of processors because of their extraordinary speed, accuracy and processing power. Super computer are all suited for solving highly complex problems and huge amount of calculations. For example : JAGUAR, ROADRUNNER, etc.
2. **Main frame computer:** These computers are very large often filling an entire room and can process thousands of millions of instructions per second. These computers are capable of supporting hundreds of thousands of users simultaneously. Some of the function performed by a main frame include flight scheduling, reservation and ticketing for an airline etc. For example: IBM main frames Z13, IBM system Z9 main frame
3. **Mini computers:** Mini computers are much smaller than mainframe . Sometime reference to a midrange server or midrange computer. Midrange computers are usually used by small and medium sized business as their server. For example Apple iPad, CDC160A.
4. **Microcomputers:** Micro computers are the most frequently used computer. It is also known as Personal Computer (PC). A micro computer is a small computer system

designed to use by one person at a time. For example Desktop computer, Laptops.

Q3.

Ans. Generation in computer technology is a change in technology a computer is being used. There are four Generation in computer.

- In the first computer system vacuum tubes are used
- Transistor are used in second generation
- Integrated circuit technology was used in third generation
- In the fourth generation microprocessor are used

Q4.

Ans.

Volatile	Non Volatile
<ol style="list-style-type: none"><li>1. It is a computer storage that only maintain its data while the device is power.</li><li>2. Example: RAM</li><li>3. Primary memory has limited storage capacity and its volatile.</li></ol>	<ol style="list-style-type: none"><li>1. It is a type of computer memory that has the capability to hold saved data if the power is turned off.</li><li>2. Example: ROM Hard disk</li><li>3. Secondary memory provide permanent storage of data.</li></ol>

Q5.

Ans. **System software:** It is a type software that is designed to run a computer hardware and application programs, software like operating system compilers, editor and drivers etc. come under this category. A computer cannot function without the presence of system software.

Whereas

**Application software:** It is a software created for a specific purpose used beyond user. It can be called as application or simply an app.

Eg. Word processor, accounting app. Etc

While

**Open Source Software (OSS):** it is a type of computer software in which source code is released under a licence in which the copyright holder guard users right to study change and distribute the surface to anyone and for any purpose. Eg The Linux operating system.

Q6(a)

Ans. My name is Narendra Mairembam and I'm 21 years old. I live with my parents and siblings. I have three elder sisters and one younger brother. I'm doing my graduation in Imphal College. I love reading comic book on my leisure time. Black is my favourite colour.

The steps involved are

1. We click the Microsoft office button
2. We select new. The new document dialog box appears.
3. We select blank document under the Blank and recent section. It will be highlighted by default.
4. To save the document, we click again the Microsoft office button.
5. We select save as – Word-Document. the save as dialog box appears.
6. Select the location where we want to save the document using drop down menu
7. We enter the Name of the document and
8. We click the save button.

Q6(b).

Ans. Steps to change the font style

1. We select the text that we want to modify.
2. Left click the drop down arrow next to the font style box on the home tab. The font style drop-down menu appears.
3. We move the cursor over the various font styles. A live preview of the font will appear in the document.
4. Left click the font style we want to use. The font style will change in the document.

Steps to change the font size

1. We select the text we want to modify.
2. Left click the drop-down arrow next to the font size box on the home tab. The font size drop-down menu appears.
3. We move the cursor over the various font sizes. A live preview of the font size will appear in the document.
4. Left click the font size we want to use. The font size will change in the document.

Steps to change the font colour

1. We select the text we want to modify.

2. Left click the drop down arrow next to the font colour on the home tab. The font colour menu appear.
3. We move the cursor over the various font colour. A little preview of the colour will appear in the document.
4. Left click the font colour we want to use. The font colour will change in the document.

Step to highlight (in yellow) the line that reads “need to get IMS’s address”.

1. We select the line that need to get IMS’s address.
2. We click the highlight command and select yellow colour in the font group on the home tab.

Q7.

Ans. MS Word

**MS Word** is a widely used commercial word processor develop by Microsoft.

*MS Word* is application software, which is capable of

- creating,
- editing,
- saving, and

**printing any type of document**

The steps involve are as follows:

1. We click the Microsoft office button.
2. We select new. The new document dialog box appears.
3. We select blank document under the blank and recent section. It will be highlighted by default.
4. We click create. A new blank document appears in the word window.
5. We create the given documents from the question.
6. We select the text “MS Word” and change the font size by clicking on the font size box on the home tab.
7. We select the text “MS Word”, to change the font colour into red by clicking on the font colour menu.
8. We select the “word processor” and underline it by clicking the underline command in the font group on the home tab.
9. We select the text “MS Word” to change the font style into italic by clicking the italic command.
10. We select the text we want to format as a list and click the bullet command on the home tab.



Ans. The steps are:

1. We place our insertion point in the document where we want the table to appear.
2. We select the insert tab.
3. We click the table.
4. We drag our mouse over the diagram. Squares to select the number of columns and rows in the table.
5. Left click on the mouse, and the table appears in the document.
6. We enter the text into the table.

**Steps:**

1. Open MS-word and select the blank document.
2. Type the require text.
3. Place the cursor on the position where you want to add table.
4. Click on the **Insert Tab** to insert a table.
5. Then, click the **Table** command on tool bar.
6. Click the **Insert Table** in dialog box.
7. Choose the require numbers of rows and columns.
8. Click on **OK** option and the table is finally inserted.

Q11. Ans.

Roll No	Name	Marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88
10	n10	55

Q12. Ans.

Roll No	Name	Marks
1	n1	60
2	n2	70
3	n3	80
4	n4	90
5	n5	40
6	n6	50
7	n7	77
8	n8	44
9	n9	88
10	n10	55

Total	654
Average	65.4
Highest	90
Minimum	40

Q13.

Ans. (a) Answer:

- To modify column width of a worksheet:
  - i. Select a column or a range of columns.
  - ii. Select a **Home** tab and in the **Cells** group, select **Format**.
  - iii. Click on **Column width** and type the width for column.
  - iv. Select **OK**.
- To modify the row height of a worksheet.
  - i. Select a row or a range of rows.
  - ii. Select a **Home** tab and in the **Cells** group, select **Format**.
  - iii. Click on **Row Height** and type the height for row.
  - iv. Select **OK**.
- To delete rows and columns of a worksheet.
  - i. Select the cell you want to delete within the column or row.
  - ii. Select **Home** tab. And in cells group click on **Delete Sheet Column or Row**.

**OR**

  - i. Select the desire row or column.
  - ii. **Right-click** and select **Delete**.

Q13. (b) Answer:

➤ **Absolute Reference:**

An absolute reference in Excel means there is a fixed point of reference applied to a cell or a formula. This is so the return value will always stay the same no matter where the cell or formula moves to – within the same sheet or across different sheet.

This refers to a fixed point of reference is a constant, and involves the use of dollar sign \$ in the formula (i.e., everyone is to receive the same bonus payout, so the amount \$1500 is constant in this situation).



Microsoft Excel  
97-2003 Worksheet

➤ **Relative Reference:**



It is the default cell reference in Excel. It is simply the combination of column name and row number without any dollar (\$) sign. When you copy the formula from one cell to another the relative cell address changes depending on the relative position of column and row. C1, D2, E4, etc. are examples of relative cell references. Relative references are used when we want to perform a similar operation on multiple cells and the formula must change according to the relative address of column and row.



Microsoft Excel  
97-2003 Worksheet

This refers to a relative point of reference, is constantly changing and dollar sign (\$) is absent in the formula (i.e., when each unit price and quantity are difference variables, there's no constant in the calculation).

➤ **Cell Address:**

A cell address is a combination of column letter and a row number that identifies a cell on a worksheet.

For example, A1 refers to the cell at the intersection of column A and row 1; B2 refers to the second cell in column B, and so on.

When used in formula, cell references help Excel find the values the formula should calculate. For instance,

- To pull the value of A1 to another cell, you use this simple formula:  
=A1
- To add up the values in cells A1 and A2, you use this one: =A1

Q14.(a)

Ans. Tools available to customize our PowerPoint presentation are:

1. Perspector.
2. PivotViewer.
3. Autodesk 3DS Max
4. VisualBee PowerPoint Add-In
5. SmartArt
6. Animation and Transitions
7. Wordle
8. Cacao

Q14 (b)

- Ans. To open blank presentation:
- I. Open PowerPoint presentation using 'Run' command (window key + R).
  - II. Select the 'Blank Presentation'. It is opened.
- Save the Presentation as Lab1.pptx.:
- I. Select the 'File' on Tab bar.
  - II. Click on 'Save As' option.

- III. Click on document/Desktop as your choice.
- IV. Type the name 'Lab1.pptx'.
- V. Click the 'Save' button.

- Add a Title to the first slide: the name of your college.
  - i. Left click on the 'Click to Add Title' section on the first slide.
  - ii. Type the name of your college.
- Type your first name and last name in the subtitle section:
  - i. Left click on the 'Click to Add Subtitle' section.
  - ii. Type your first name and last name.
- Add a New slide which has a Title and content.
  - i. Select the Home tab.
  - ii. Click on the dropdown button of the 'New Slide' on toolbar.
  - iii. Select the slide having 'Title and Content'. It is added.

Q15.

- Ans. Title slide and bullet list:
  - i. Open PowerPoint Presentation.
  - ii. Select the Home tab.
  - iii. Click at the dropdown button on 'New Slide' at toolbar.
  - iv. Select the slide having Title slide and Bullet list.
- Inserting Excel sheet:
  - i. Open the slide where you want to insert the Excel Sheet.
  - ii. Select the 'Insert tab'. And click on 'Object' on tool bar.
  - iii. Select the 'Microsoft Excel Worksheet' object type.
  - iv. Click the 'OK' button.
- ClipArt and Text:
  - i. Select the Insert Tab.
  - ii. Select the 'Pictures' or 'Online pictures' on tool bar.
  - iii. Choose the appropriate art for the topic.
  - iv. Click on the 'Insert' button.
- Slide show effects:
  - i. Select 'Design Tab' for Themes, Variants and Slide size.
  - ii. Select 'Transition Tab' for Cut, Fade, Push, Wipe, Split, Reveal, Shape, Flash, etc. for slide effects.

Q16.

Ans.

Machine Language	High level language
A computer programming language consisting of binary instructions which a computer can respond directly.	A high level language is a programming language that enable development of a programming a much more user friendly programming content.

Q17.

Ans.

1. char- It is the most basic data type in c programming language. It stores a single character and requires a single byte of memory in almost all compilers.
2. Int.-As the name suggests an int. variable is used to store an integer.
3. float- It is used to store decimal numbers (numbers with floating point value).
4. Double- it is used to store decimal numbers (numbers with floating point value is high as compare to float).

Q18a.

Ans.  $X=20/5*2+30-5$

$$=4*2+30-5$$

$$= 8+30-5$$

$$=38-5$$

$$= 33$$

(b)  $Y = 30-(40/10+6) +10$

$$= 30-10+10$$

$$= 30$$

(c)  $Z= 40*2/10-2+10$

Q19.

Ans.

**a) If – else statement:**

If statement can be followed by an optional else block of statements, which executes when the boolean expression is false.

Syntax

```
if (test-expression)
{
    True block of statements
}
Else
{
    False block of statements
}
Statements;
```

In this type of construct, if the value of test-expression is true, then the true block of statements will be executed. If the value of test expression is false, then the false block of statement will be executed. In any case, after the execution, the control will be automatically transferred to the statements appearing outside the block of If.

(b) for loop is similar to While loop. Basic syntax of for loop is as follows

For (expression 1; expression 2; expression 3)

```
{
    Block of statement
}
```

In the above syntax.

- Expression 1 – Initializes variables.
- Expression 2 – conditional expression, as long as this condition is true, loop will keep executing.

- Expression 3 – expression 3 is the modifier which will increase or decrease the value of variable.

(c) While loop.

Basic syntax of while loop is as followed

```
While (condition)
    Single statement.
```

OR

```
While (condition)
{
    Block of statements
}
```

(d) do – while loop

Unlike **for** and **while** loops, which test the loop condition at the top of the loop, the **do-while loop** in C programming checks its condition at the bottom of the loop. A **do-while** loop is similar to a while loop, except the fact that it is guaranteed to execute at least one time.

The syntax of a do-while loop in C programming language is –

```
do {
    statement(s);
} while (condition);
```

at the

loop executes once before the condition is tested. If the condition is true, the flow of control jumps back up to do, and the statement(s) in the loop executes again. This process repeats until the given condition becomes false.

Notice that the conditional expression appears end of the loop, so the statement(s) in the

A **do-while** loop is a kind of loop, which is a kind of control statement. It is a loop with the test at the bottom, rather than the more usual test at the top. This kind of loop is most often used when the test doesn't make any sense until the statement have been performed at least once.

Q20.

Ans.

- A) Ans. IMS Ghaziabad
- B) IMS Ghaziabad  
IMS Ghaziabad
- C) Largest number is 100