Assignment-1 Fundamental of IT & Programming

Submitted by Chingthianven

Q1 What are the four fundamental parts of computer? Explain with the help of diagram.

Answer: Four fundamental parts of computer are:

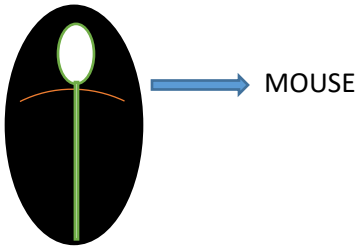
i)Input unit

ii)the central processing unit or CPU

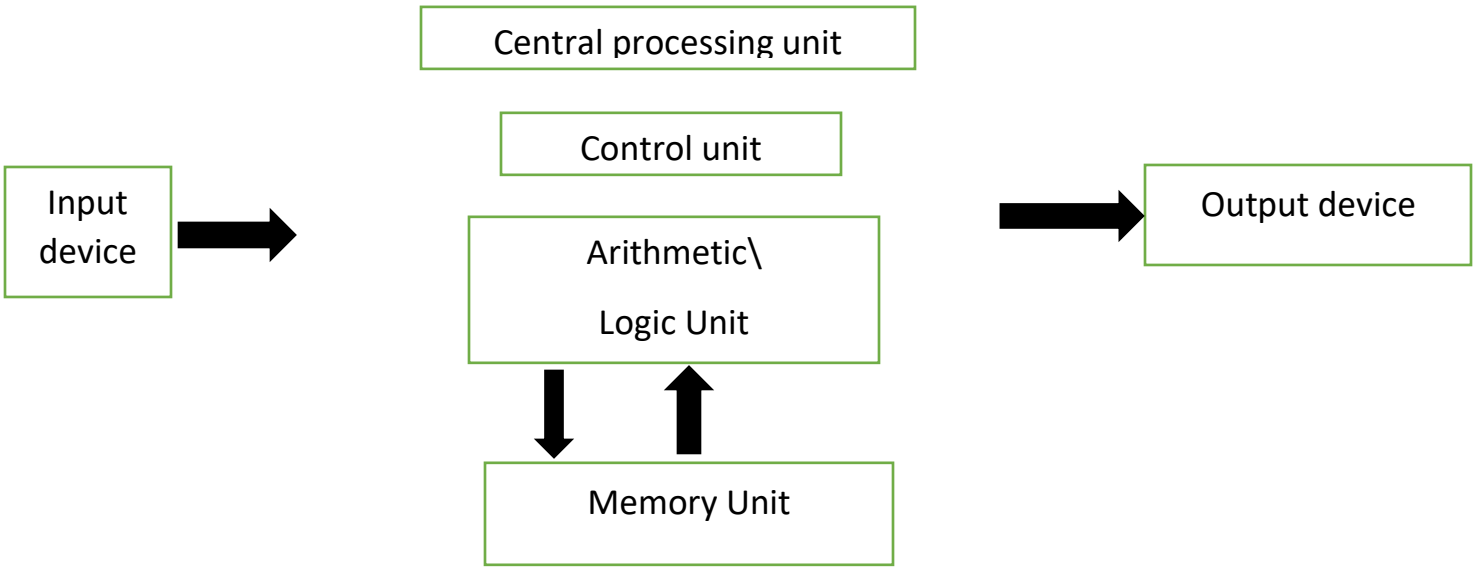
iii)The primary memory

iv)Output unit

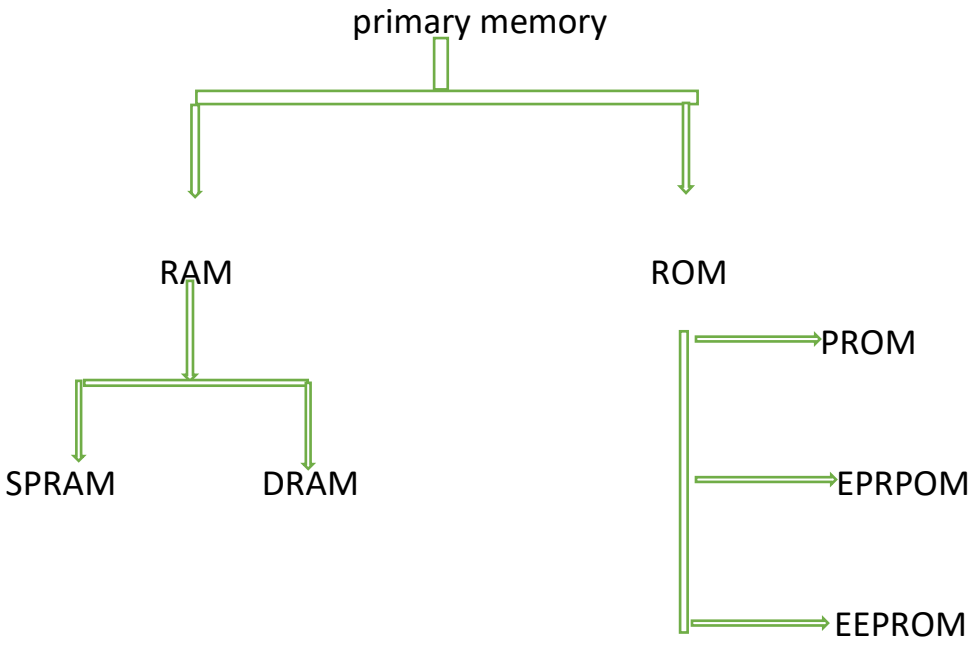
i)INPUT UNIT: Input unit is used to feed any form of data to the computer which can be stored in the memory unit for further processing.



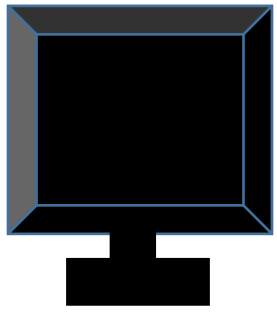
ii)Central processing unit or CPU: CPU is the major component which interprets and executes software instructions. It also controls the operation of all other component as memory, input and output.



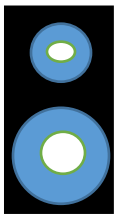
iii)The primary memory: Once the CPU convert a specific set of computer program instruction into a machine code it stores that machine code in primary storage or memory.



iv)output unit: Output unit are the devices of computer uses to relay information to the user such as a printer, monitors and speaker .



MONITOR



SPEAKER

Q2.

Q2. Discuss about the classification of computers based on size and capacity.

Answer: Classification of computer based on size and capacity by the following:

i)Microcomputer: Microcomputer are relatively small and low cost. They consist of CPU, an input, an output unit, a storage unit and the software. Although it stands alone machine they can be connected together to create a network of computer that can serve more than one user.

ii) Minicomputer: Minicomputer are digital computer generally used in multi-user systems. They have high storage capacity than the microcomputer. Minicomputer can support up to 4-200 users simultaneously.

iii)Mainframe computer: Mainframe computer are multi-user, multi-programming and high performance computers. They operate at a very high speed, have a very large storage capacity and can handle the workload of many use.

iv)Super computer: Super computer are the fastest and most expensive machines. They have high processing speed compared to other computers.

Q3. What is the meaning of computer generation? How many Computer Generation are defined? What technologies were\are used?

Answer: Computer generation is a change in technology a computer is\was being used. Initially the generation term was used to distinguish between varying hardware technologies.

There are five computer generation till date:

i)First generation: The period of first generation 1946-1959 vacuum tube based.

ii)Second generation: The period of second generation 1959-1965. Transistor based.

iii)Third generation: The period of third generation 1965-1971. Integrated circuit based.

iv)Fourth generation: The period of fourth generation 1971-1980. VLSI microprocessor based v) Fifth generation: The period of fifth generation 1980 onwards. ULSI Micro Processor based.

Artificial Intelligence (AI) is the technology used for equipping computer systems with the ability to make decision like humans.

1.Data science 2. Internet of things 3. Block chain 4. Robotic Process Automation (RPA) 5. Virtual Reality 6. Edge Computing 7. Intelligent Apps

Q4. Differentiate between Volatile & Non-Volatile memories.

Answer:

Volatile	Non-Volatile
i)Volatile memory is the type of memory in which data is lost as it is powered-off.	i)Non-Volatile memory is the type of memory in which data remains stored even if it is powered –off.
ii)Content of volatile memory is stored temporarily.	ii) Contents of Non-Volatile memory is stored permanently.
iii)It is faster than non-volatile memory.	iii) It is lower than volatile memory.

Q5. Distinguish among system software, application software and open source software on the basis of their features.

Answer: System software: System software provides an interface between the system hardware and the user. It lets the system understand the command that the user input. The user only gets to interact with the GUI that has been created by the system software.

An application software: An application software as software written on a high-level language such as JAVA, C++, net and VB for instance. This software is meant to meet some specific needs of the user. There is a specific purpose behind every application software.

Open source software: Open source software is computer software that is released under a license in which the copy right holder grant users right to use, study , change and distribute the software and its source code to anyone and for any purpose.

Q6. a) Create a file in MS-word to insert a paragraph about yourself and save it with file name “yourself”. Describe all steps involved in it.

b) Write step regarding followings

- To change the font style
- To change the font size
- To change the font color
- To highlight (in yellow) the line that reads “need to get IM’S address”

Answer: To change the font style:

1. Select the text you want to modify.
2. Select the Home tab and locate the Font Group.
3. Click the drop-down arrow next to font style box.
4. Font style menu appears.
5. With a left click select the desire font style.
6. If you want to change the font to bold or italic, click the ‘B’ or ‘I’ icon on the format bar.

To change the font size:

1.Select the text or cells with text you want to change. To select all text in a Word document, Press Ctrl+ A.

2.On the home tab, click the font size in the Font size box.

3. Then it can be type in any size.

To change font color:

1.Select the text you want to modify.

2. In the Home tab locate the font group.

3.Click the drop-down arrow next to Font color button.

4.Font color menu appears.

5.Select the desire font color with a left click.

6.Word will change the Font color of the selected text.

Yellow Highlight Text:

1.Click the Home tab.

2. In the font group click the Text Highlight button. Word is now in Highlighting mode.

3.Drag the mouse over the text you want to highlight.

4.Click the Text Highlight button again to return the mouse to normal operation.

Q7. Create a file in MS-Word for the following document and save it with file name “MS-word”. Describe all steps involved in it.

Answer: MS-word is a widely used commercial word processor developed by Microsoft.

MS word is application software, which is capable of

- creating
- editing
- saving and
- printing any type of document

The step involved in it are:

1.Click the file tab

2.Click save as

3.Click Browse and then select the location to save the file

4. In the save as type list, click Open Document Text
5. Give the file name and then save it

Q8. Create a file in MS-word for the following document and save it with file name 'Equations'. Describe all steps involved in it.

Equations

$X_2 + Y_5 = 30$

$z^3 + Q^4 = 50$

$A_2 + B^8 = X_2 + Y^8$

All steps involved in it are:

1.Click the file tab

2.Click save as

3.Click Browse and then select the location to save the file

4.In the save as type list, click Open Document Text

5.Give the file a name and then save it

Q9. Create a file in MS-word that convert existing highlight text to table as shown below and save it as file name 'Text-to-table'. Describe all steps involved in it.

Select the text you want to convert

Select the **Insert** tab

Click on **Table** command. A dialog will appear

Click on **Convert Text to Table, a new** dialog box appears

Click on OK Finally Selected text convert in a table

Select the text you want to convert	Select the Insert tab
Click on Table command. A dialog box will appear	Click on Convert Text To Table, a new dialog box appears
	Click on OK Selected text convert in a table

Answer: 1. Select the text you want to convert.

2.Select the Insert tab.

3.Click the Table command.

4.Select Convert Text to Table from the menu. A dialog will appear.

5. Choose one of the options in the Separate text at section. This is how Word knows what text to put in each column.

6. Click OK.

Q10. Create a file in MS-Word to insert a table in the document. Describe all steps involved in it.

Answer: 1. Click on table from the menu bar. Select Insert, and then Table.

2. Enter the desired numbers of rows and columns.

3. Choose Auto Fit behavior if you want the table's cells to automatically expand to fit the text inside them.

4. Click OK to insert your table.

Q11)

Answer

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)

Answer

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. a) Describe various steps involved in the following

To modify column width of a worksheet

To modify the row height of a worksheet

To delete rows and columns of a worksheet

Answer: To modify the column width of a worksheet:

1. Identify the column width you wish to resize.

2. Hover your mouse on the right boundary of that column so that you see across or T shape.

3. Hold down your mouse button and drag the right boundary until you reach the desired pixel width.

4.Release the mouse button.

To modify the row height of a worksheet:

1.Select the row or rows that you want to change.

2.On the home tab, in the cell group, click format.

3.Under Cell Size, click Row height.

4.In the Row height box, type the valve that you want, and then click OK.

To delete rows and columns of a worksheet:

1.Right-click in a table cell, row or column you want to delete.

2.On the menu, Click Delete Cells.

3.To delete one cell, choose Shift cells left or Shift cell up. To delete the row, click Delete entire row. To delete the column, click Delete entire column.

Q13 b) Describe following terms in the worksheet

I) Absolute reference and relative reference in formula

ii) Cell address

Answer: I) Relative reference change when a formula is copied to another cell. Absolute reference, on the other hand, remain constant no matter where they are copied.

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

Q14. a) What tools are available to customize our Power point presentation?

Answer: 1.Perspector

2.Pivot Viewer

3.Autodesk 3DS Max

4.Visual Bee Power Point Add-in

5.Smart Art

6.Animations and Transaction

7. Wordle

8.CA coo

9.Oomfo

10.Clip champ

Q14 b) Write the steps for the following action for creation of power point presentation

i) Open a Blank Presentation

ii) Save the presentation as Lab1.ppxt

iii)Add a Title to the first slide: the name of your college

iv)Type your first name and last name in the Subtitle section

v)Add a New Slide which has a title and a Content

Answer: i)Open a Blank Presentation:

1.Open PowerPoint presentation using 'Run' command (window key+ R)

2.Select the (Blank Presentation). It is opened.

ii)Save the Presentation as Lab1.pptx:

1. Select the 'File' on Tab bar.

2.Click on 'Save As' option.

3.Click on document \Desktop as your choice.

4.Type the name 'Lab1.pptx'

5.Click the 'Save' button.

iii)Add title to the first slide: the name of your college:

1.Left click on the ‘Click to Add Title’ section on the first slide.

2.Type the name of your college.

iv)Type your first name and last in the subtitle section:

1.Left Click on the ‘Click to Add Subtitle section’.

2.Type your first name and last name.

v)Add a new slide which has a Title and content:

1. Select the Home Tab.

2. Click on the drop down button of the ‘New Slide on toolbar’.

3. Select the slide having ‘Title and Content’. It is added.

Q15.Write the steps for creation pf a set of PowerPoint slides that demonstrates your skill to use the tool of PowerPoint. It should include the following things

i) Title slide &bullet list

ii)Inserting Excel sheet

iii)Clip art and Text

iv)Slide show effects

Answer: I) Title slide and Bullet list:

1.On the view tab, click Normal.

2.Click in the text box or placeholder where you want to add bulleted or numbered text.

3.On the Home tab, in the Paragraph group, click bullet or Numbering and begin typing your list. Press return to create a new list item.

4.To add a slide title to an existing slide go to the ‘Home’ tab and click “Layout” then “Title Only”.

5.Then place your cursor in the ‘Click to add title’ box on the slide and type in your unique slide title.

ii)Insert Excel Sheet:

1.In PowerPoint on the Insert tab, click or tap Project.

2.In the Insert Object dialog box, select Create from file.

3.Click or tap Browse, and in the Browse box, find the Excel workbook with the data you want to insert and link to.

4.Before you close the Insert object box, select Link, and OK.

iii)Clip art and Text:

1.Click in the slide where you want to insert a clip art file.

2.On the Insert tab, in the Images a group, click Online Picture.

3.In the Insert Picture dialog box, enter your search items in.

iv)Slide Shown Effects:

1.Select the object or text you want to animate.

2.Select Animation and choose an animation.

3.Select Effect Options and choose an effect.

Part-2

Q16.What is the difference between Machine Language and High Level Language?

Answer: A Machine Language is the only language that a computer directly understands, it is usually written in zeros (0) and ones (1). A program instruction in machine language may look something like this 111010110010001.

High Level Language is a programming language that uses English and mathematical symbols like +, -, % and many other in its instruction.

Q17.Discuss about different data types of C Programming Language.

Answer:

Type	Description

Int	Stores zero, positive and negative values without decimal. The value can be signed or unsigned. The value assigned to int is considered positive by default if it is unsigned.
Float	Stores decimal values with single – precision.
Double	It stores decimal values and double-precision.
Char	Stores a single character.

Q18.Find the output of the following expressions:

a) X=20\5*2+30-5 b) Y=30-(40\10+6) +10 c) Z=40*2\10-2+10

Answer: a)X=20\5*2+30-5

=33

b) Y=30-(40\10+6) +10

=10

c)Z=40*2\10-2+10

=16

Q19.Describe the syntax of the following statements

a) If-else statement b) for loop c) while loop d) do-while loop

Answer: a) If-else statement:

The if-else statement is an extended version of it. The if-else statement is used to perform two operations for a single condition. The if-else statement is an extension to the if-else statement using which, we can perform two different operations, i.e, one is correctness of that condition and the other is for incorrectness of the condition. Here, we must notice that if and else block cannot be executed simultaneously. Using if-else statement is always preferable since it always invokes an otherwise case with every condition. The general form of if-else syntax is given below.

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.

{

Statements

In this type of construct, if the value of test-expression is true, then the true block of statement 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 it.

Then if statement specific a block of code to be executed if a condition is true. And the else statement specific a block of code to be executed if the condition is false.

b) for loop:

A for loop is a repetition control structure that allows you to efficiency write a loop that needs to execute a specific number of times. The syntax of a For Loop in C programming is-

For (init; condition increment statement(s):

}

c)While Loop:

The syntax of a While Loop is C programming language is while (condition) {statement(s);}. Here, statement(s) may be a single statement or a block of statements. The condition may be an expression, and true is any non-zero value. The Loop iterates while the condition is true.

d) do-while loop:

The syntax of Do While Loop is as follow:

1.do {

2.*statement(s); *\

3./*increment loop counter*\

4.} while (condition);

Q20. Find the output of the following program segments

a)	b)	c)

#include<stdio.h>
Int main()
{
Printf("IMS Ghaziabad\n");
}
}
	#include <stdio.h>
	Int main()
	{
	While(i=2)
	{
	Printf(IMS Ghaziabad\n");
	I=i+1;
	}
	}
		#include<stdio.h>
		Void main()
		{
		Int a=10, b=100;
		If(a>b)
		printf("Largest number is %d\n",a);
		Else
		Printf("Largest number is %d\n",b);
		}

Answer: a) IMS Ghaziabad.

b) IMS Ghaziabad.

IMS Ghaziabad

c) Largest number is 100.