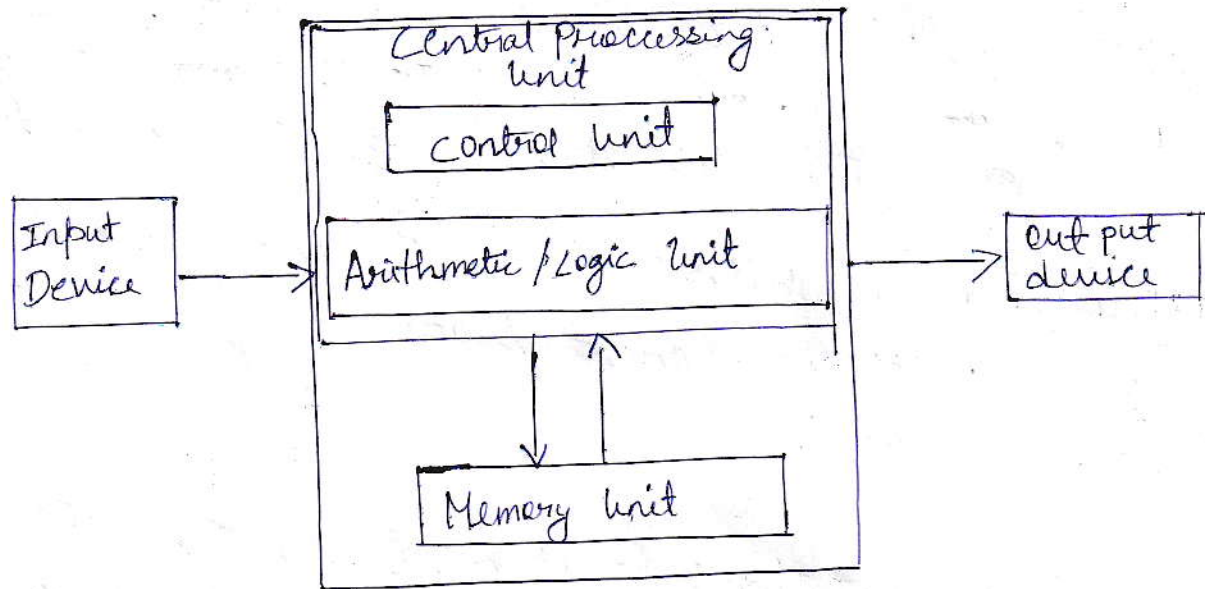


Assignment - I

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

Ans. The four fundamental parts of computer are Input, Processing unit, Memory unit and output.



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

Ans. The classification of computer based on size and capacity are.

1. Super computer: Super computer is the most powerful and physically largest in size. These ^{system are} design ~~are~~ to process huge amount of data, the fastest Super computer and can performed over one trillion calculation in a second. Super computer are well suited for solving highly complex problem and performing huge amount of calculation.

2. Mainframe Computer: Mainframe computer are very large in often filling an entire room and can process thousand of instruction per second. Mainframe computer are capable of

supporting hundred to thousand of user simultaneously.

3. Mini Computer: Mini computer are much smaller than Mainframe. Sometime referred to as Midrange Server or Midrange computer they are typically larger, more powerful and more expensive than desktop computer.

4. Micro Computer: Micro computer are most frequently use type of computer. Micro computer is a small computer system designed to be use by one person at a time.

5. Distributed Computer: Distributed computer is limited to program with component share among computer within a limited geographic area.

6. Parallel Computation: It is a type of computer in which many calculation or the execution of process are carried out simultaneously. Large problem can divided into a small one, which can solve at the same time.

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

Ans. The generation of computer means the gap between the development of the computer in term of the technologies

There are five generation they are,

1. First generation (Technology used - vacuum tubes): The first computer system used vacuum tubes for circuitry and magnetic drums of memory. The first generation computer generated

a lot of heat, which was often cause of malfunction. The UNIVAC ~~was~~ was the first commercial computer delivered to a business client, the U.S Census Bureau in 1951

2. Second generation (Technology used - Transistor): The world would see transistor replace vacuum tubes in the second generation of computer. The transistor was invented at Bell Labs in 1947.

3. Third generation (Technology used - Integrated circuits): The development of the Integrated Circuits was the Hall Mark of the third generation of computer. Instead of punched cards and punchcard, users interacted with generation computer through Keyboard and Monitor

4. Fourth generation (Technology used - Microprocessor): The Microprocessor brought the fourth generation of computer as thousand of integrated circuits were into a single silicon chip. Fourth generation of computer also saw the development of GUIs, the mouse and handheld devices

5. Fifth generation (Technology used - Artificial Intelligence): The fifth generation based on artificial intelligence, are still in development though there are some applications such as voice recognition that are being used today.

Q4. Differentiate between volatile and non-volatile memory?

Ans.

Volatile memory is used to store computer program and data that CPU need in real time and is erased once computer is switched off. Whereas non-volatile memory is static and remain in the computer even if the computer is switched off.

Q5 Distinguish among system software, application software and open ^{sources} software on the basis of their features?

Ans. System Software

1. Generally written in a low level language
2. System software is difficult to design and understand
3. It is smaller in size.

Application Software

1. Generally written in a high level language
2. Easy to design and more interactive for the user
3. It need more storage space as it is bigger in size.

open sources software

1. Non-proprietary software which may or may not be used commercially
2. Typically licensed under an open sources license
3. Source code is generally made available.

Q6 (b). Create a file in MS-Word to insert a paragraph about "yourself" and save it with file name "yourself". Describe all step involved in it?

Ans.

step 1 $\Rightarrow$ Open MS words.

step 2 $\Rightarrow$ Type a paragraph about My self

step 3 $\Rightarrow$ click microsoft office button

step 4 $\Rightarrow$ Select and click save as

step 5 $\Rightarrow$ In the file name box type the file name
"yourself"

step 6 $\Rightarrow$ click on save button.

Q6(b) Write steps regarding following

1. To change the font style.

- Ans.
1. Select the text you want to modify
 2. Select the home tab
 3. Click the drop down arrow next to font style box
 4. Font style menu appear
 5. Then select the style as you want to apply.

2. To change font size.

1. Select the text you want to modify
2. Select the home tab
3. Click the drop down arrow next to font style box
4. Font size ~~menu~~ menu appear
5. Then select the size you want to apply

3. To change font colour

1. Select the text you want to modify
2. Select the home tab
3. Click the drop down arrow next to font style box
4. Font colour menu appear
5. Select the colour you want to apply.

4. To highlight (in yellow) the line that read "need to get IMS's address".

1. In M.S words type "need to get IMS's address"
2. Select this line to be highlighted
3. Click the drop down arrow ~~text~~ next to the text highlight colour box
4. Select the colour.

Q7. Create a file in MS words for the following document and save it with file name 'ms-word'. Discuss all step involved in it

Ans. step 1 $\Rightarrow$ MS words . .

step 2 $\Rightarrow$ Type the following document -

MS words is a widely used commercial word processor develop by Microsoft. MS word is application software, which is capable of

- creating
- Editing
- Saving
- printing any type of document

step 3 $\Rightarrow$ click on Microsoft office button and select save as.

step 4 $\Rightarrow$ In the file name box type the file name as 'ms-word'

step 5 $\Rightarrow$ click on save button.

Q8. Create a file in MS word for the following document and save it with file name 'equations'. Discuss all step involved in it.

Equations.

$$X_2 + Y_5 = 30$$

$$Z^3 + Q^4 = 50$$

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

step 1 $\Rightarrow$ open MS word

step 2 $\Rightarrow$ Type the equation

step 3 $\Rightarrow$ click on Microsoft office button and select save as.

step 4 $\Rightarrow$ In the file name box type the file name as "equations"

step 5 $\Rightarrow$ click on the save button.

Q9. create a file in MS words that convert existing highlight text to table as shown below and save it as file name 'text-to-table'. Describe all step involved in it?

Ans.

Step 1 $\Rightarrow$ Type the text

Step 2 $\Rightarrow$ Select the text

Step 3 $\Rightarrow$ click on the insert tab

Step 4 $\Rightarrow$ Click on the table command

Step 5 $\Rightarrow$ select convert text to table

Step 6 $\Rightarrow$ Specify number of columns

Step 7 $\Rightarrow$ Select paragraph at separate text option.

Step 8 $\Rightarrow$ Click OK button.

Step 9 $\Rightarrow$ click on Microsoft office button

Step 10 $\Rightarrow$ select save as option

Step 11 $\Rightarrow$ In the file name box, type 'text-to-table'.

Step 12 $\Rightarrow$ click on save button.

Q10. Create table in Ms words. Discuss all the steps involved in it?

Ans.

1. select the place where we want to insert the table
2. select the insert tab
3. From the table box click on table and select rows and column depending on the document

Q11. Create the following worksheet in MS Excel and save it with name book 1?

Ans.

- Step 1 $\Rightarrow$ open microsoft office excel
- Step 2 $\Rightarrow$ Type the data for rollno, name, Marks in the worksheet
- Step 3 $\Rightarrow$ From the sheet tab, right click on sheet 1 and rename it as book 1
- Step 4 $\Rightarrow$ Click on microsoft office button and select save as
- Step 5 $\Rightarrow$ In the file name box type the file name as book 1
- Step 6 $\Rightarrow$ click on save button.

Q12. Calculate the following things of a range (C2:C11) of data in the worksheet created in question no 10

$\Rightarrow$ the sum of the marks using Auto Sum in a range of cells (C2:C11).

Ans.

- Step 1 $\Rightarrow$ Select the C12 cell.
- Step 2 $\Rightarrow$ click on the auto sum drop down menu from the home tab
- Step 3 $\Rightarrow$ select Sum function (C2:C11 will automatically appear)
- Step 4 $\Rightarrow$ Press Enter to get result.

> average of marks in a range of cells. (C2:C11)

Ans. step 1 $\Rightarrow$ Select the cell C12.

step 2 $\Rightarrow$ Select the auto sum ^{drop down} menu

step 3 $\Rightarrow$ select average function (C2:C11 will automatically appear)

step 4 $\Rightarrow$ press enter to get result.

> High marks in a range of cell (C2:C11).

Ans. step 1 $\Rightarrow$ select the cell C12.

step 2 $\Rightarrow$ select the auto sum drop down menu

step 3 $\Rightarrow$ Select the MAX function (C2:C11 will automatically appear)

step 4 $\Rightarrow$ press enter to get result.

> minimum marks in a range of cell (C2:C11)

Ans. step 1 $\Rightarrow$ Select the cell C12

step 2 $\Rightarrow$ select the auto sum drop down menu

step 3 $\Rightarrow$ select the min function (C2:C11 will automatically appear)

step 4 $\Rightarrow$ press enter to get result

Q13(a) Describe various step involved in the following

- > To modify column width of a worksheet
- > To modify the row height of a worksheet
- > To delete rows and column of a worksheet

Ans.

To modify the row height of a worksheet

1. position the cursor over the row line, so the cursor become arrow
2. click and drag the mouse to increase or decrease the row height
3. Release the mouse. the height of the selected row will be change.

To delete rows and column of a worksheet.

1. Select the rows or column that we want to delete
2. Right-click, and then select the appropriate delete option.

To modify column width of a worksheet

1. Select the column we want to change
 2. On the Home tab, in the cell group, click format
 3. Under cell size, click column width
 4. In the column width box, type the value that we want
 5. Click OK.
-

- Q13(b) Describe the following term in the worksheet
- > absolute reference and relative reference in formula
 - > cell address.

Ans:

Absolute Reference: An absolute reference is designated in the formula by the addition of a dollar sign (\$). It can precede the column reference or the row reference or both

\$A\$2 : The column and the row do not change when copied

A\$2 : The row does not change when copied

\$A2 : The column does not change when copied.

Relative Reference: Cell reference in formula automatically adjust to new location when the formula is pasted into different cell. This is called a relative reference.

Example formula
$$= F3 * C3$$

Cell Address: A cell address is a combination of A column letter and A row number that identifies A cell on A worksheet for example.

A₁ refer to the cell at the intersection of column

A and Row 1, B₂ refer to the second cell in column B.

814(a). What tools are available to customize our power point presentation?

Ans. .. Themes, Illustrations, media clip, Table, animations, Transitions; drawing etc are the tools available to customize our power point presentation.

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

1. open a blank presentation
2. Save the presentation as Lab 1. pptx
3. Add a title to the first slide the name of your college
4. Type your first name and last name in the subtitle section
5. Add a new slide which has a title and content

Ans. step 1. open Microsoft power point (a blank presentation will automatically appear, or create a blank presentation, we click on microsoft button, select new and select blank presentation)

step 2. Again click on microsoft button

step 3. Click on the save as option

step 4. Type the file name as "Lab 1. pptx"

step 5. click on save button

step 6. On the "click to add title", type Synod College

step 7. On the subtitle section Type Rihunshika Wahlang

step 8. From the slide box in the home tab, click on new slide

step 9. click on save button.

Q15 write step for creation of a set of power point slide that demonstrates your skill to use the tools of power point. It should include the following things

> Title slide and bullet list.

> Inserting Excel sheet

> Clip art and text

> Slide show effect.

Ans: step 1 $\Rightarrow$ click on new slide drop down menu from the home tab

step 2 $\Rightarrow$ select the title slide

step 3 $\Rightarrow$ click on the "click to add title"

step 4 $\Rightarrow$ click bullets drop down menu from the home tab

step 5 $\Rightarrow$ select any bullet list and we type it as cats and dogs

step 6 $\Rightarrow$ click the object option from the insert tab

step 7 $\Rightarrow$ select the Microsoft office excel worksheet and click OK.

step 8 $\Rightarrow$ click on the new slide from home tab

step 9 $\Rightarrow$ In the add subtitle area, select any cats and dogs searched from the clip art section from the insert tab

step 10 $\Rightarrow$ Adjust the size of the cats and dog pictures

step 11 $\Rightarrow$ In the add title area, type cat and dogs

step 12 $\Rightarrow$ select any transition from the animation tab to apply slide show effects.

step 13 $\Rightarrow$ click on the Microsoft office button

step 14 $\Rightarrow$ click save as

step 15 $\Rightarrow$ In the file name box, write cats and dog

step 16 $\Rightarrow$ click on save button.

Part - 2.

Q16 What are the different between Machine language and High level language?

Ans. Machine language consists of binary code and is the only language that is directly understood by the computer whereas A High level language is a programming language that uses English and mathematical symbols in its instructions.

Q17. Discuss about different data types of C programming language?

Ans. A few common data types supported by C programming languages are as follows.

Type	Keywords	value range which can be represented by the data range.
Character	char	-128 to 127 or 0 to 255
Number	int	-32,768 to 32,767 or -2,147,483,648 to 2,147,483,647.
Small Number	short	-32,768 to 32,767
Long number	long	-2,147,483,648 to 2,147,483,647
Decimal Number	float	1.2E-38 to 3.4E+38 till 6 decimal place.

These data types are called primitive data types.

18b) Find out the output of the following expressions

(a) $x = 20 / 5 * 2 + 30 - 5$

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

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

Ans. output ÷

$x = 33$

$y = 42$

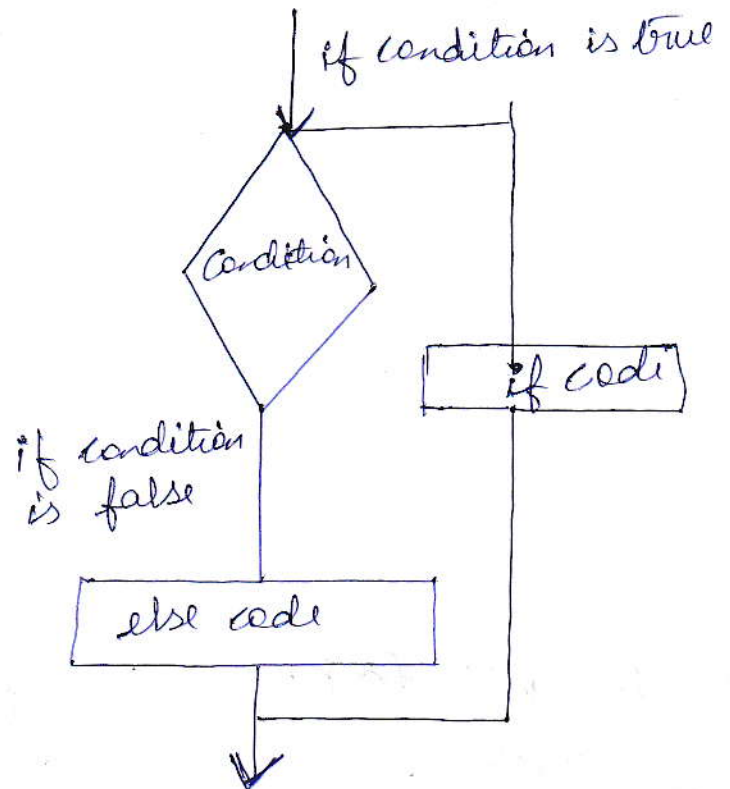
$z = 188$

Q19. Describe the syntax of the following statement

(a) If - else statement

Ans. Syntax

```
if ( expression )  
{ Block statement ;  
}  
else  
{ Block statement  
}
```



(b) for loop.

Ans. Syntax -

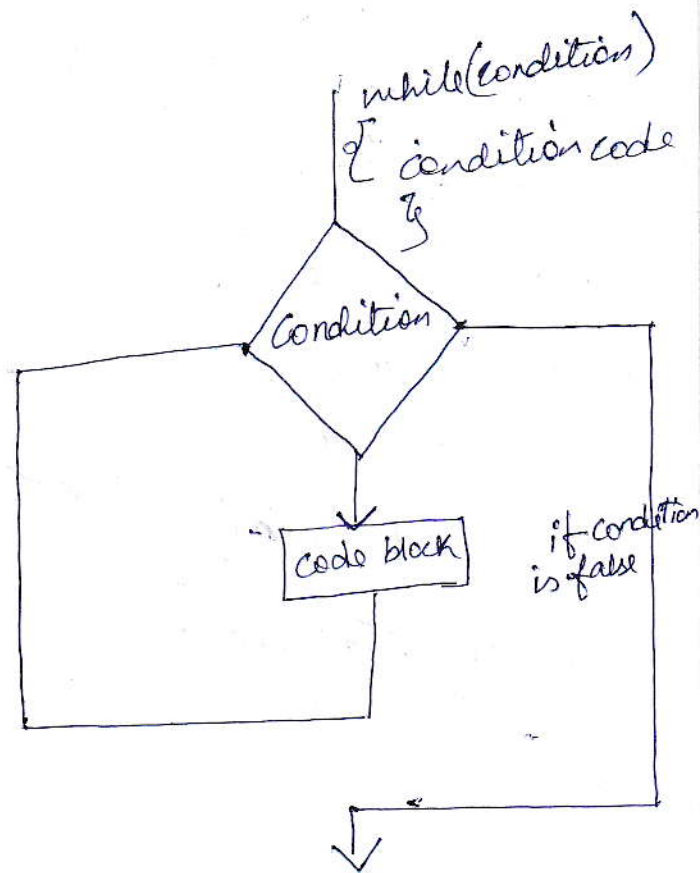
for (expression 1; expression 2; expression 3.)

{
single statement
or
Block statement
}

(c) while loop.

Ans. Syntax

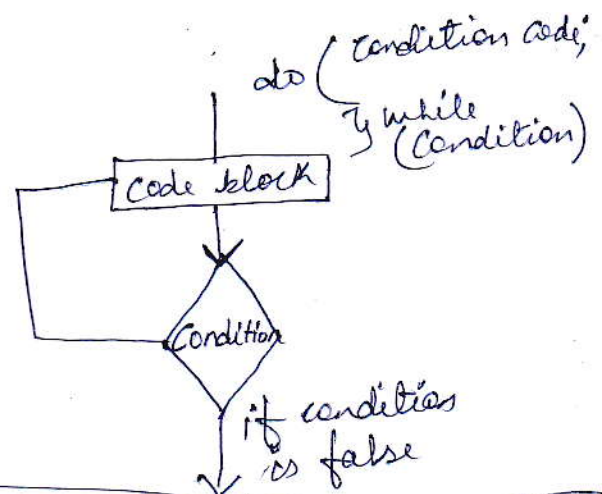
{ single statement }
or
Block statement;
}



(d) do-while loop.

Ans. Syntax -

{ single statement
or
Block statement
} while (expression);



Q20. Find the output of the following program segment

(a)

(a)	(b)	(c)
<pre>#include <stdio.h> int main() { int i; for (i=1; i>2; i++) { printf("IMS Gha- ziabad\n"); } }</pre>	<pre>#include <stdio.h> int main() { int i = 1; while (i <= 2) { printf("IMS Gha- ziabad\n"); i = i + 1; } }</pre>	<pre>#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); }</pre>

Ans. (a) output is IMS Ghaziabad

Ans. (b) output
IMS Ghaziabad
IMS Ghaziabad

Ans. (c) output
Largest number is 100.