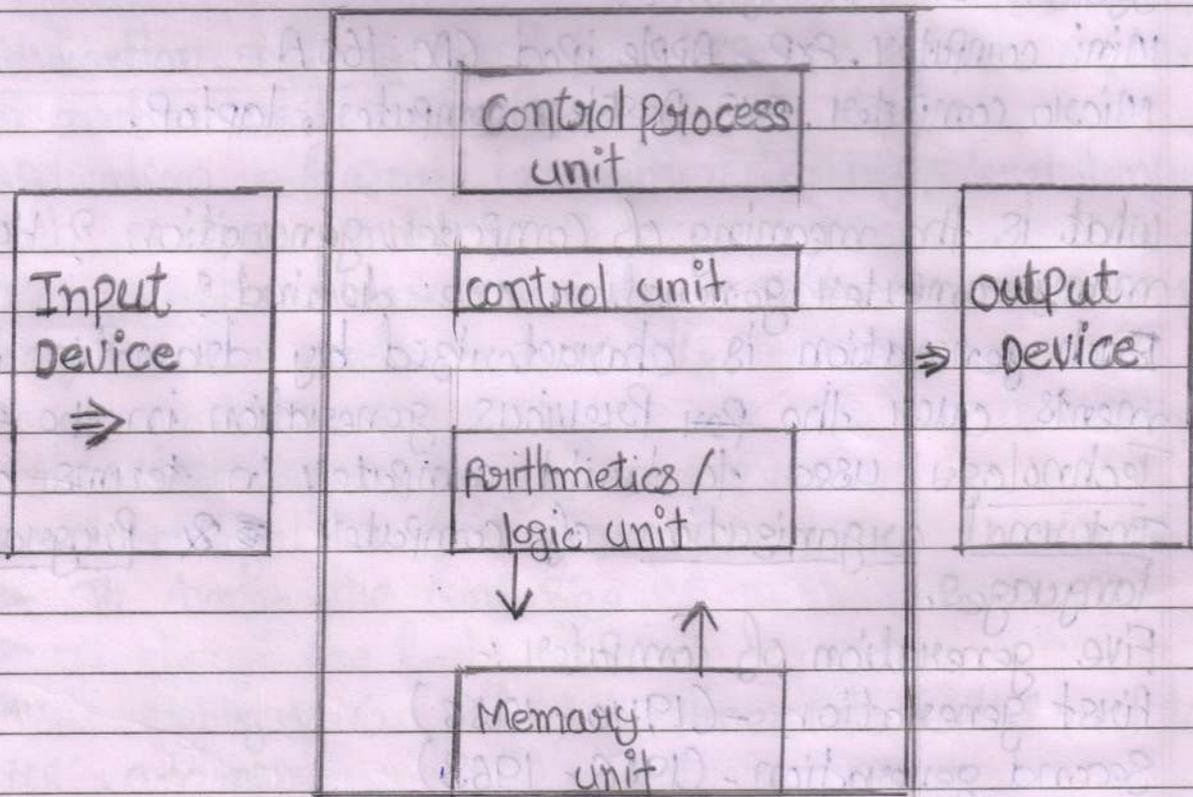


CGA-101 fundamentals of IT

& Programming

Assignment - 1

Q:1 what are the four fundamental parts of computer? Explain with the help of diagram.



1. Input device :- Computer system use many devices for input purpose. input devices include the mouse, micro phones, input pen, touch screen & Example :- Mouse, Keyboard.

2. C.P.U :- (Central Processing unit) - it is the brain of computer can not process with out it.

3. Output device :- Output device is used to show the result of the instructions. EXP. Monitor, Printer, Headphones, etc.

4. Memory unit :- A memory unit is the collection of storage unit as a device together. The memory unit store the binary information in the form of bits.

Q:2 Discuss about the classification of computer based on size and capacity.

- Ans. 1. Super computer (JAGUAR, ROAD-RUNNER)
 2. Mainframe computer. EXP. IBM mainframes, Z13, IBM system Z9 Mainframe.
 3. Mini computer. EXP - Apple ipod GDC 160A
 4. Micro computer. EXP. Desktop computer, laptop.

Q:3 What is the meaning of computer generation? How many computer generation are defined?

Ans. Each generation is characterized by dramatic improvements over the ~~for~~ previous generation in the ~~the~~ technology used to build computer in terms of the internal organization of computer & programming languages.

⇒ Five generation of computer :-

1. First generation - (1940 - 1956)
2. Second generation - (1956 - 1963)
3. Third generation - (1964 - 1971)
4. Fourth generation - (1971 - Present)
5. Fifth generation - (Present by Beyond)

Q:4 Differentiate between volatile & Non-volatile memories.

Ans.	Volatile	Non volatile
1.	Temporary storage	Permanent storage
2.	Store data M.B.S	Store data GBs
3.	writing data is faster	writing data is slower
4.	used in normal operation	used for start up process of computer
5.	It called Ram	It called Rom.

- Q:5 Distinguish among System software, application software and open source software on the basis of their feature.
- Ans. 1// System software :- It is a general purpose software.
System software is written in low level language. A computer can not run without system software.
- 2// Application software :- 1) It is a specific purpose software.
2) It enables users to perform specific tasks.
3) Application software is written in high level language such as java and C++.
- 3// Open source :- Non-proprietary software which may or may not be used commercially.

Q:6 write steps 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 IMS' address."

a). Select the text you want to modify.

- click on font style box on the home tab, The font style drop-down menu appears.
- Move your cursor over the various font styles.
- left-click the font style you want to use
- Then font style will change in the document.

b). select the text you want to modify.

- click on font size box in the font group, on the Home tab.
- Move your cursor over the various font sizes.
- left click on font size you want to use.
- Then it will change font size in your.

- c). Select text you want to modify.
- Click on the font colour box on the home tab.
 - Move your cursor over the various font colour.
 - Left-click the font ~~color~~ ~~will~~ change in the document you want to use.
 - Then font colour will change in the document.
- d). Select the text highlight colour in the home tab.
- Various colour will appear.
 - Move your cursor over the various colour.
 - Click on ~~color~~ colour you want to use.
 - Then text highlight colour will change in the document.

* MS - Word *

Q: 6) MS-Word is application software, which is capable of...

Ans. ➤ Creating a new document :- click the Microsoft office button / file tab.

* Select new

* Select blank document.

* A new document appears in the word window.

* Now you can create document by inserting text.

* Finally save document.

➤ Printing :-

* Click on file tab, menu appears.

* Then click on print and

* A print window will pop up on the screen.

* Finally click on OK for your document to start

Printing.

➤ Saving :- To save document using save as command

* click the Microsoft office button / file.

* Select save as word document.

* Select the location where you want to save the document using the drop down menu.

- * Enter a name for the document.
- * Click the Save button.

Q. 7 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 box appears.
- * Click on Convert text to table, a new dialog box appears here set number of columns.
- * Click on OK finally selected text convert in a table.

Q. 13(a) Describe various steps involved in the following.

- Ans. A) To modify column width of a work sheet.
- * Select the column or columns that you want to change.
 - * On the home tab, in the cells group.
 - * Click under cell size, click column width.
 - * In the column width box, type the value that you want.
 - * ~~Click~~ Click OK button.
- B) To modify the row height of a work sheet.
- * Position the cursor over the row line the cursor becomes a double arrows.
 - * Click and drag the mouse in increase or decrease the row height.
 - * Release the mouse, The height of the selected row ~~is~~ will be changed.
- C) The delete rows & columns :-
- * Select the row or column you want to delete.
 - * Click the delete command in the cells group on the home tab.
 - * Selected column or row deleted.

Q:13 b) Describe following terms in the worksheet

➤ Absolute reference & relative reference in formula

f Ans. ⇒ Relative Reference :- cell reference in formula automatically adjust to new location when the formula is posted into different cells.

- Sometimes when you copy & paste a formula, you don't want one or more cell references to change.

EXP. ⇒ =SUM(C1:C2)

⇒ Add Absolute Reference :- cell reference or cell range of a formula is copied to a different location;

EXP :- \$A\$2 :- The column & the row do not change when copied.

\$A2 :- column don't change.

A\$2 :- Row doesn't change.

⇒ cell address :- Each rectangle in the worksheet is called a cell. Each cell has a name, or a cell address, based on the column and row where it is located. In below diagram name of selected cell is C3 because column head is C and row head is 3.

Q:14 a) what tools are available to customize our Powerpoint Presentation?

f Ans. Tools are available to customize our Powerpoint Presentation there are :-

1. Home
2. Insert
3. Design
4. Transitions
5. Animations
6. Slideshow
7. Review
8. view
9. format
10. file.

b) write the steps for the following action for creation of power-point presentation:

- open a blank presentation :-
 - click on start.
 - select MS office Powerpoint option.

- Double click on it.
- Save the presentation.
 - Locate & select the save command on the quick access toolbar.
 - Save the file & give it a file name.
 - The save as dialog box will appear.
- Q.15 write steps for creation of a set of Power-Point slides that demonstrates your skill to use the tools of Power-Point.
- Inserting excel sheet :-
 - Select the insert tab & click the insert tab.
 - click the object command in the text group.
 - A dialog box will appear.
 - Locate & select the desired excel file then click insert.
- Clip art :-
 - select insert tab.
 - click the online picture.
 - click the clipart.
 - select a picture.
 - ok.
- Text :-
 - click on the title, subtitle, or place holder.
 - Type the text as you want.
 - Press on enter to move to a new line.
 - click anywhere on the slide outside of the place holder to select it.
- Slide show effect :- * * * * *
 - select the object or text you want to animation.
 - click to choose an animation.

- select effect options and you want to click on effect.

Part - 2

Q:-16 what is the difference between machine language and High level language?

Ans. Machine language :- This language make fast & efficient use of the computer. It is directly understood by the computer. All memory address have to be remembered.
High-level language :- It is programmer friendly. They are easy to write, debug & maintain.

- It provide highest level of abstraction from machine language.
- Easy to learn.

Q:-17 Discuss about different data types of C programming language.

Ans. 1. char :- The most basic data type in C. It stores a single character & 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.

4. Double :- It is used to store decimal number (numbers with floating point's value) but its range of values is high in comparison to float.

--*-*-*

Q: - 8 Create a file in MS Word for the following document and save it with file name '**Equation**', describe all steps involved in it.

Equation:-

$$X_2 + Y^5 = 30$$

$$Z_3 + Q^4 = 50s$$

$$A_2 + B^8 = X^2 + Y^8$$

Steps: - Subscript command

- Select the text you want to modify.
- Click on the subscript command on the home Tab.
- Then it will change the text as subscript in the Document.

Superscript command

- Select the text you want to modify.
- Click on the superscript command on the Home tab.
- Then it will change the text as superscript in the Document.

Q:-9 Create a file in MS word that convert exiting 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 box appears.	Click on convert text t table a new dialog box appears.
Here set number of columns.	Click on ok finally selected text convert in a table.

Q:-10 Create a file in MS word to insert a table in the document.
Describe all Steps involved in it.

Insert a table

- Place your insertion point in the document where you want to insert table
- Select the insert tab.
- Click the table command.
- Drag your mouse over the diagram squares to select the number of column and rows in the table.

Q:-18 Find the output of the following expressions

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

Ans. $X=4*2+30-5$

$$X=8+30-5$$

$$X=38-5$$

$$X=33$$

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

Ans. $Y=30-(4+6)+10$

$$Y=30-10+10$$

$$Y=20+10$$

$$Y=30$$

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

Ans. $Z=80/10-2+10$

$$Z=8-2+10$$

$$Z=6+10$$

Q:- 19 CONTROL STATEMENTS

If... else statement:

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

Syntax

If (expression)

```
{  
    True block of statement;  
}
```

Else

```
{  
    Else block of statement;  
}
```

While loop:

- **Basic syntax of while loop is as following:**

```
While (condition)  
    Single statement;
```

OR

```
While (condition)
```

```
{  
    Block statement;  
}
```

FOR LOOP

For loop is similar to while. Basic syntax of for loop is as following:

```
For (expression1; expression2; expression3)
```

```
{  
    Block of statement;  
}
```

DO...WHILE LOOP

Do...while is just like a while loop except that the test condition is checked at the end of the loop rather than the start. That has the effect that the body of the loop are always executed at least once.

Basic syntax of do...while loop is as following:

Do

```
{
```

Single statement

Or

Block statements

```
} While (condition);
```

Q:- 20 Find the output of the following program segments.

a)	b)	c)
#include<stdio.h>	#include<stdio.h> Int main()	#include<stdio.h>
<pre>Int main() { Int i; For(i=1; i<2; i++) { Printf ("IMS Ghaziabad\n"); } }</pre> <p>OUTPUT</p> <p>IMS GHAZIABAD IMS GHAZIABAD</p>	<pre>{ Int main() { Printf ("IMS Ghaziabad\n"); I=i=1; } }</pre> <p>OUTPUT</p> <p>IMS GHAZIABAD IMS GHAZIABAD</p>	<pre>Void main() { Int a=10, b=100; If(a>b) Printf ("largest number is %d\n", a); Printf ("largest number is %d\n", b); }</pre> <p>OUTPUT</p> <p>Largest m</p>

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

Auto sum		654
Average		65.4
MAX		90
MIN		40