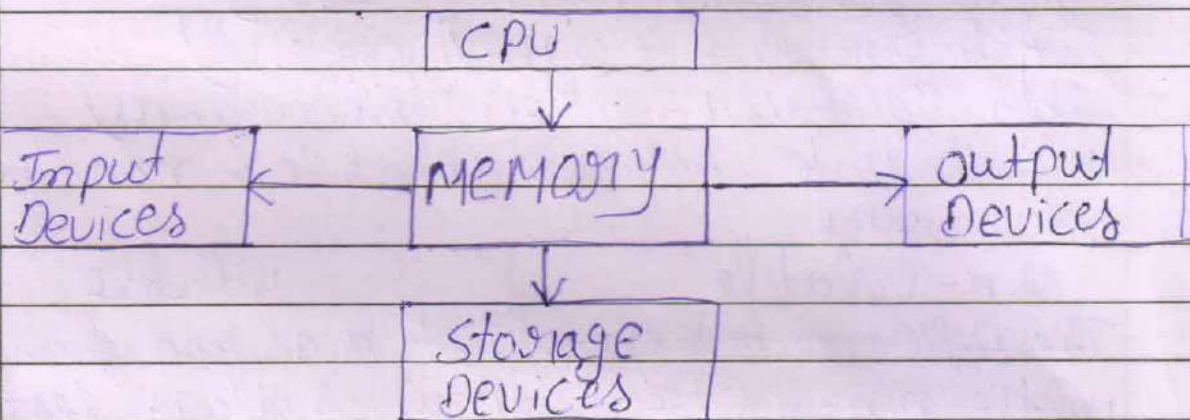CCA-101 · Fundamentals of IT & programming

Assignment - 1.

Q:1: what are the four Fundamental parts of Computer? Explain it with the help of diagram.

Ans: At a high level, all Computers are made up of a processor (CPU), memory, and Input/output devices. Each computer recives input from a variety of devices, processes that data with the cpu and memory, and sends results to some form of output.

```
                    ┌──────────┐
                    │   CPU    │
                    └────┬─────┘
                         ↓
┌──────────┐      ┌──────────┐           ┌──────────┐
│  Input   │ ←────│  MEMORY  │ ─────────→│  output  │
│ Devices  │      │          │           │ Devices  │
└──────────┘      └────┬─────┘           └──────────┘
                       ↓
                  ┌──────────┐
                  │ Storage  │
                  │ Devices  │
                  └──────────┘
```

Q:2. Disuss about the classification of Computers based on Size and Copacity?

Ans. ① Microcomputers
② Minicomputers
③ Mainframe computers
④ supercomputers

Capacity = capacity planning based on the timeline is classified into three main Categories long orange, medium

orange and short range. Long Term Capacity.

Q:3 what is the meaning of Computer generation? How many Computer generations are defined? What technologies were /are used?

An: generation in Computer terminology is a change in techology a computer is/was being used. Nowadays, generation includes both hardware and Software, which together make up an entire Computer system.

- First generation (1940 - 1956)
- Second generation (1958 - 1963)
- Third generation (1964 - 1971)
- Fourth generation (1971 - 2010)
- Fifth generation (210 to present)
- Sixth Generation (Future generations)

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

Ans:

Non-volatile	volatile
1. The Difference between and volitle non-volitle memory are as follows:-	1. It is a type of memory in which data is Last as it is power off.
1. It is the type of memory in which data remains stored even if It is power off.	
② memory is stored perm permanently	② memory is stored temporary.
	③ It is faster than non-volatile memory
④ It is slower than volatle memory	

Q:5. Distinguish among System software, application software and open Source Software on the basis of their features.

System Software :- ① It is a general - purpose software ② System Software is written in low-level languages.

③ A Computer Cannot run without System Software.

④ It does not depend on application software.

⑤ System Software examples include operating system (Microsoft windows, MacoS, and Computer, and Assembler.

S 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++.

④ A computer can run without Application Software.

Open Source Software : ① Non-proprietary Software which may or may not be used Commercially.

② Typically licensed under an open Source license (not given away)

③ Source Code is generally made available – Legal restriction on reverse engineering (under the DMCA) do not apply.

Q:6 Create a File in MS-world to insert a paragraph about yourself and Save with File name eyourself Describe all steps involved in it.

Ans: • Click the File tab.

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.

My name is Jaswinder kaur.my father name is Gurdeep singh. My mother name is kulwinder kaur. I live in Jalal. I am 25 years old. My qualification 10th,12th B.A and M.A. my hobbies are reading books. I have many friends but name ramandeep kaur and pardeep kaur is my best friends. I getup early morning. My favourite colour black and yellow. I am also learning cycling so that I can keep myself healthy. I love to dance. I love to study storybooks as a pastime.my father is a farmer.my mother is a housewife. I am also very found of watching various movies.In the end I would like to say that I want to spot my family.

Q6.b) write steps regarding followings

➢ To change the font style

1. Click format > text style.

2. In the ltem to change list, click all, then select the font, size, or color you want for all text in the current view. …

3. Repeat this process for other views.

➢ 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.

➢ To change the font color

1. Select the text that you want to change.

2. On the home tab, in the font group, choose the arrow next to font color, and then select a color.

 ➢ to highlight (in yellow) the line that reads"needs to get ims,s address".

1. Click the home tab. In the font group, click the text highlight button.wors is now in highlighting mode.

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

    ➢

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.

Ms word

Ms word is a widely used commercial <u>word processor</u> developed by Microsoft.

Ms word is application software, which is capable of

- Creating,
- Editing,
- Saving, ~~and~~
- **Printing any type of document**

Q8.Create a file in MS-Word for the following document and save it with file name 'equations'. Describe

All steps involved in it.

<u>Equations</u>

$X_2 + Y_5 = 30$

$Z_3 + Q^4 = 50$

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

Q9.create a file in ms- word that convert existing hightlight 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 table.

⇩

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 table.

Q10. Create a file in Ms –word to insert a table in the document. Describe all steps involved in it.

1. Click insert> table and move the cursor over
2. The grid until you highlight the number of columns and rows you want.
3. Then select ok.

CALCUATE THE FOLLOWING THINGS OF RANGE (C2:C11) OF DATA IN THE WORKSHEET CREATED IN QUE

	Name	Marks	
			THE SUM RANGE CELLS(C3:C12)654
1	n1	60	average the range of cells(C3:c12)65.4
2	n2	70	highest marks in na range of cells(C3:C12)90
3	n3	80	minimum marks in a range of cells(C3:C12)40
4	n4	90	
5	n5	40	
6	n6	50	
7	n7	77	
8	n8	44	
9	n9	88	
10	n10	55	
		654	
		65.4	
		90	
		40	

90
40

Q:13 Describe various steps involved in the following

Ans: A To modify column width of a worksheet.

- Select the column or columns that you want to change.
- On the Home tab, in the cells group, click forma under Cell Size, click Column width.
- In the column width box, type the value that you want.

5. Click OK.

B To modify the row height of a worksheet.

- Position the cursor over the row line so the cursor becomes a double arrow.
- click and drag the mouse in increase or decrease the row height.
- Release the mouse. The height of the selected row will be changed.

C The delete rows and columns of a worksheet.

Column:- • Select any cell within the column, then go to Home > Insert > Insert sheet Column or Delete sheet columns

- Alternatively, right-click the top of the column, and then select Insert or Delete.

Row:- • Select any cell with in the row, then go to Home > Insert > Insert sheet Rows or Delete sheet Rows.

- Alternatively, right-click the row number, and then select Insert or Delete.

Q:13 b Describe following terms in the worksheet?

A Absoul Absolute reference and relative reference

in formula.

Ans: There are two types of cell references: relative and absolute. Relative and absolute references behave differently when copied and filled to other cells. Relative references change when a formula is copied to another cell. Absolute references, on the other hand, remain constant no matter where they are copied.

This is the most widely used type of cell reference in formulas. Relative cell references are basic cell references that adjust and change when copied or when using Auto Fill. EX : =SUM(B5: B8), as shown below, changes to =SUM(C5:C8) when copied across to the next cell.

B
—
2 Cell Address : 1) A cell reference, also renowned as a cell address, is a scalar quantity that is used in a worksheet to identify a single cell.

2 Each cell reference starts with a letter and comes to an end with a number.

Q:14 a **what tools are available to customize our power point presentation?**

Ans: Tool #1: Templates and themes   10: Tables
Tool #2: Slide Layouts   11: Flow·charts
Tool #3: Fonts   12: Icon Charts
Tool #4: Color themes   13: Radials
— 5: Icons   14: Progress Bars
— 6: Shapes   15: Animation
— 7: Stock photos   16: Transitions
— 8: Charts and Graphs   17: Interactivity
— 9: Maps   18: Audio And video

Q:14 b **write the steps for the following action for creation of power point presentation**

Ans: **A** open a Blank presentation
• Click the File tab.
• Click open. press Ctrl+O
• Select the location where the File is Saved. Recent display. a list of presentation that you've recently opened.
• locate and do double - click the File you want to open.

B: Save the presentation as Lab 1. pptx
• open the presentation in powerpoint.
• On the File tab, click Save AS.
• In the Save As dialog box, in the Save as type list, click powerpoint presentation (*. pptx).
• Click Save.

C Add a title to the first slide. the name of your College.

Guru Gobind Singh Khalsa Bhagta Bhai Ka

Jaswinder kaur

About Myself

- My name is Jaswinder kaur.
- My Father name is Gurdeep Singh.
- My Mother name is Gurmeet Kaur.
- My hobby is to read Books.
- I live in jalal.distt.bti.

0:15 Write steps for Creation of a set of power point slides that demonstrates your skill to use the tools of powerpoint. It should include the following things.

Ans :- A) Title slide & bullet list.

- Choose Insert > new Slide, click the new Slide button on the toolbar, or press the hotkey Ctrl +M.

- From the slide Layout task pane, choose the Bulleted List layout

- Click the title placeholder and type the title of your bulleted list.

- Click the text placeholder and type your bulleted text.

Title Slide :- Click Home > layout. Select Title Slide for a standalone title page or select Title and content for a slide that contains a title and a full slide text box. many other layout options include titles, too. Pick the one that's best suited for your presentation. Select the click to add title text box.

b) Inserting Excel sheet :

- Select the new sheet plus icon (+) at the bottom of the workbook.

- Or, Select Home > Insert > Insert sheet.

c) Clip art and text

- open the power point. open the power point and go to "Insert" > "online pictures".

- Select the Clip Art ----

- Insert the clip Art ——.
- Select the image in the PDF File —
- Edit the Image.
- Add Image to PDF.

text = Select Insert > text Box. Select either Draw Horizontal text Box or Vertical text Box.

- Select a shape or a Connector.
- Type in the text.
- select a blank area on the drawing page.

Slide show effects

- Select the Slide to which you want to apply the effect.
- Select the Animation tab.
- In Transition to this Slide group you will see the transition effects.
- Click the drop-down arrow to see menu of transition effectss.
- Select the desired transition effect.

P-2

Q.16 what is difference between Machine Language and High Level Language ?

And:

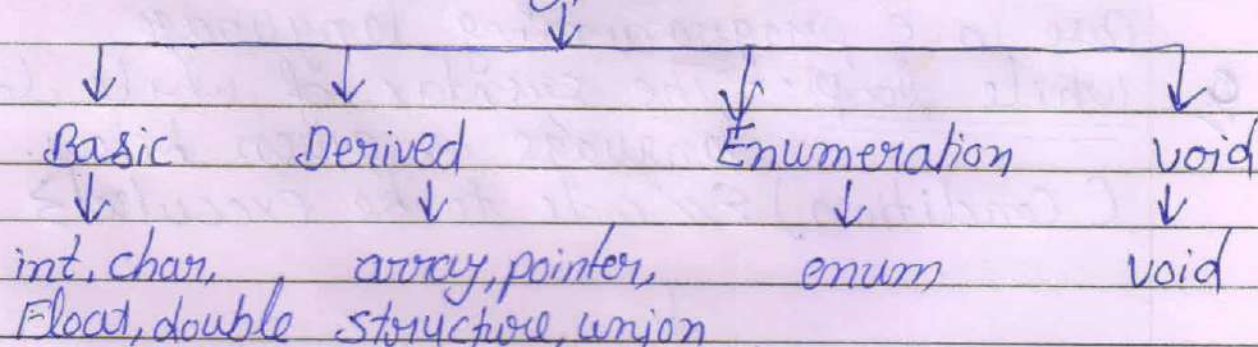| High Level Language	Low-Level Language
It can be Considered as a programmer-friendly language.	It is Considered as a machine-friendly language.
It can be ported from one location to another	It is not portable.

High - Level Language	Low - level language
• It is easy to under-stand.	It is difficult to under-stand.
• It is easy to debug.	It is difficult to debug.
• It is less memory efficient i.e, it	It Consumes less memory
• to be translated into machine code.	would translate instructions
• It is easy to debug.	It is difficult to debug.

Q:17   Discuss about different data types of programm-ing language.

ans:

Data Types in C

↓	↓	↓	↓
Basic	Derived	Enumeration	void
↓	↓	↓	↓
int, char, Float, double	array, pointer, structure, union	enum	void

Q: 18   Find the output of the following statements.

Ans : (a)

Q19. Describe the syntax of the following statements

a) If –else statement

```
if (condition) {
  // block of code to be executed if the condition is true
}
```

The **else** statement specifies a block of code to be executed if the condition is false:

```
if (condition) {
  // block of code to be executed if the condition is true
} else {
  // block of code to be executed if the condition is false
}
```

The **else if** statement specifies a new condition if the first condition is false:

```
if (condition1) {
  // block of code to be executed if condition1 is true
} else if (condition2) {
  // block of code to be executed if the condition1 is false and
condition2 is true
} else {
  // block of code to be executed if the condition1 is false and
condition2 is false
}
```

b) for loop

```c
#include <stdio.h>

int main () {

  int a;

  /* for loop execution */
  for( a = 10; a < 20; a = a + 1 ){
    printf("value of a: %d\n", a);
  }

  return 0;
}
```

c) while loop

```c
#include <stdio.h>

int main () {

  /* local variable definition */
  int a = 10;

  /* while loop execution */
  while( a < 20 ) {
    printf("value of a: %d\n", a);
```

```c
      a++;
   }

   return 0;
}
```

d) do-while loop

```c
#include <stdio.h>

int main () {

   /* local variable definition */
   int a = 10;

   /* do loop execution */
   do {
      printf("value of a: %d\n", a);
      a = a + 1;
   }while( a < 20 );

   return 0;
}
```

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

Segment (A)

```c
#include<stdio.h>
int main()
{
    int i;
    for (i=1;i<2;i++)
    {
        printf("IMS Ghaziabad\n");
    }
}
```

Output:
```
/tmp/T5xGOXeClO.o
IMS Ghaziabad
```

Segment (B)

```c
#include<stdio.h>
int main()
{
    int i =1;
    while( i <=2)
    {
        printf("IMS Ghaziabad\n");
        i = i+1;
    }
}
```

Output:
```
/tmp/T5xGOXeClO.o
IMS Ghaziabad
IMS Ghaziabad
```

Segment (C)

```c
#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);
}
```

Output:
```
/tmp/T5xGOXeClO.o
largest number is100
```