

CCA - 101 : Fundamentals of IT and Programming

Assignment - 1

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

Ans Explanation: A computer has four main components:

- 1) Input Units
- 2) The Central Processing unit or CPU,
- 3) ~~The Primary memory~~ Storage unit
- 4) Output Units.

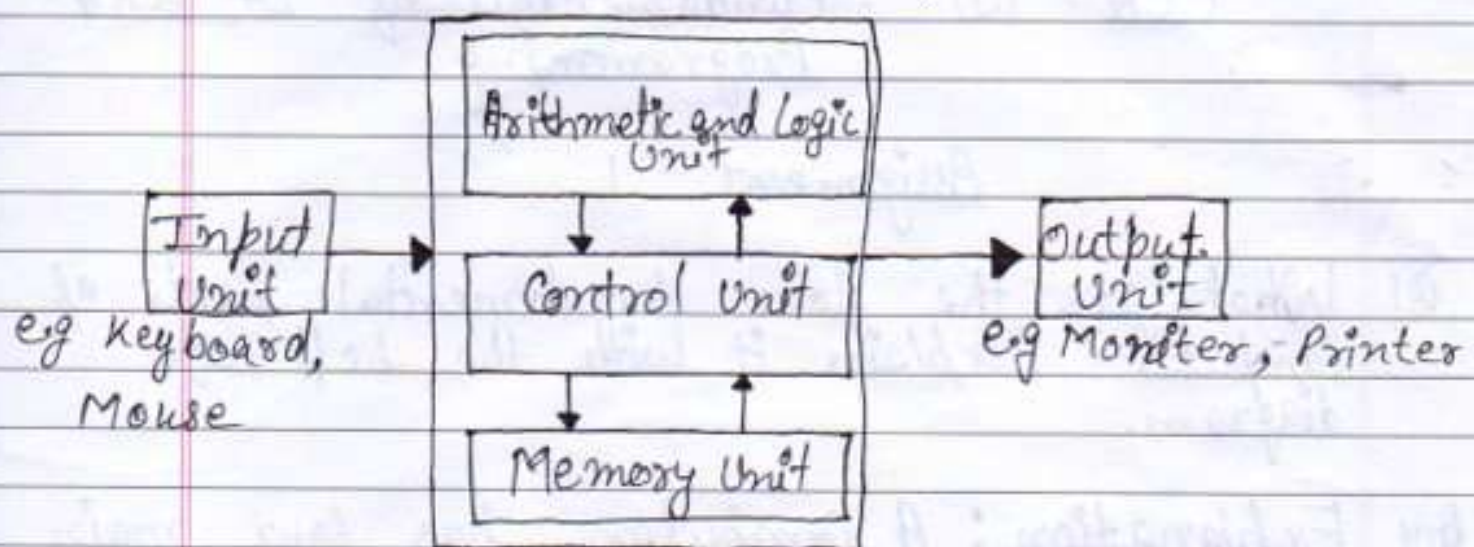
1) Input Unit : The devices to input information, such as a keyboard and mouse.

2) Central Processing Unit (CPU) :

The computer system is nothing without the Central Processing Unit. So, it is also known as the brain or heart of computer. The CPU is an electronic hardware device which can perform different types of operations such as arithmetic and logical operation.

The CPU contains two parts: The arithmetic logic unit and control unit.

Central Processing Unit (CPU)



3) Storage Unit :

The information or set of guidelines are stored in the Storage Unit of the Computer System. The Storage Unit provides the space to store the data or instruction of processed data. The information or data is saved or held in Computer memory or Storage device. The data storage is the core function and fundamentals of the Computer Components.

4) Output Devices :

The output devices produce or generate the desired result according to our input, such as a printer, monitor, etc. These devices convert the data into a human-readable form from binary code.

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

Ans Computers are classified on different parameters, such as, Storage Capacity, Processing speed and Component (CPU) used in Computers.

Features	Microcomputer	Minicomputer
Primary memory	Small memory	Larger memory
Word length	Small word length	Large word length
Cost	Low	High
Processor	Low	High

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

Ans Initially, the generation term was used to distinguish between varying hardware technologies. Nowadays, generation includes both hardware and software, which together make up an entire Computer System. There are five Computer generations known till date.

Following are the ^{main} five generations of Computers.

Q4 Differentiate between volatile and non-volatile memories?

Ans Volatile memory is the type of memory in which data is lost as it is powered-off.

Non volatile memory is the type of memory in which data remains stored even if it is powered-off.

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

Ans System software is meant to manage the system resources. It serves as the platform to run application software. Application software helps perform a specific set of functions for which they have been designed... Application software is user specific and it is not needed to run the system on the whole.

Q6a Create a file in MS-word to insert a paragraph about yourself and save it with file name yourself. Describe all steps involve in it.

Ans Choose office button → New (Alt+F, N) to open the new Document window. Then -

Click "New from existing..." (it sits directly below the "Blank document" button).

(b) Write steps regarding followings.

> To change the font style

- Ans. Select the text you want to modify.
- Select the Home tab and locate the Font group.
 - Click the drop-down arrow next to font style box.
 - Font style menu appears.
 - With a left click select the desired font style.

> To change the font size

- Ans. Open your device's Settings app.
- Tap Accessibility Font size.
 - Use the slider to choose your font size.

> To change the font color

- Ans. Select the text that you want to change.
- On the Home tab, in the Font group, choose the arrow next to Font color, and then select a color. You can also

Use the formatting options on the Mini toolbar to quickly format text. The Mini toolbar appears automatically when you select text.

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.

Ans) 1) Click the File tab.

2) Click Save As.

3) Click Browse, and then select the location where you want to save your file.

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

5) Give your file a name and then Save it.

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

Ans) 1) Click the file tab. This takes you to Backstage view.

2) select New.

3) Select Blank document under Available Templates. It will be highlighted by default. Creating a new document.

4) click creat. A new blank document appears in the word window.

Q9 Create a file in MS-word that convert 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 table, a new dialog box appears

Here set number of columns.

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 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.

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

Ans: Open a blank word document.

- 1) In the top ribbon, press insert.
- 2) Click on the Table button.
- 3) Either use the diagram to select the number of columns and rows you need, or click Insert table and a dialog box will appear where you can specify the number of columns and rows.
- 4) The blank table will now appear on the page.

Q11 Create a following worksheet in MS-excel and save it name 'book 1'.

Ans: Right - click the worksheet name tab.

1. Click select Move or copy.
2. Click on the Move selected sheets to Book drop-down menu. select (new book.).
3. Click ok. Your new workbook opens with your moved worksheet..
4. Click File > Save in your new workbook

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

> The Sum of the marks using Auto Sum in a range of cells (C2:C11)

Ans Here's a formula that uses two cell ranges = Sum (A2:A4, C2:C3) Sums the numbers in ranges A2:A4 and C2:C3. You'd press Enter to get the total of 39787.

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

Ans This formula would be written "=A2*C2" Excel Formula Example. 1. After hitting "Enter", the cell will display the calculated value, while the-----

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

Ans Criteria range 2 - a range of cells defining the school type - C2:C11. Criteria2 - "junior", which is input in cell C12. Putting the arguments-----

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

Ans Excel IF and min function returns minimum value if multiple conditions match. (C2:C11) greater than 50, which returns the minimum from the price range....

Q13 Describe following terms in the worksheet.

- Absolute reference and relative reference in formula.

Ans 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.

- Cell address.

Ans A reference is a cell's address. It identifies a cell or range of cells by referring to the column letter and row number of the cell(s). For example, A1 refers to the cell at the intersection of column A and row 1.

Q14 What tools are available to customize your powerpoint presentation?

Ans Beyond Power Point: Presentation Tools for Small Businesses

- Visme. Visme is a cloud-based presentation tool that allows you to create highly visual presentations to engage viewers and communicate your ideas...

- Haiku Deck...
- Pitcherific.
- Canva.
- SlideCamp.
- Powtoon.
- VideoScribe...
- Prezi.

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

> Title slide and bullet list.

Ans You can use bulleted or numbered lists to help organize your text or show a sequential process in your powerpoint presentation.

> Inserting Excel sheet

Ans To insert a new worksheet in front of an existing worksheet, select that worksheet and then, on the Home tab in the Cells group, click Insert, and then click Insert Sheet. Tip: You can also right-click the tab of an existing worksheet, and then click Insert.

> Clip art and Text

Ans 2049981 Text clip art images on Gogograph. Download high quality Text clip art from our collection of 6600000 clip art graphics.

> Slide show effects

Ans Slide Effect is a presentation tool providing enhanced transitions and effects. Using a standard presentation software user interface people can create slide presentation with movies and images in a simpler way than using a video editing software.

Part - 2

Q16 What is the difference between Machine language and High level language?

Ans Machine language, or machine code, consists of binary code and is the only language that is directly understood by the computer. ... Both machine code and assembly languages are hardware specific. 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 Data Types in C

Data Types	Bytes	Range
Signed char	1	-128 to 127
Unsigned char	1	0 to 255
Float	4	$1.2E-38$ to $3.4E+38$
double	8	$2.3E-308$ to $1.7E+308$

Q18 Find the output of the following expressions.

(a) $X = 20/5 \times 2 + 30 - 5$

Ans 33

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

Ans 30

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

Ans 16

Q19 Describe the syntax of the following statements.

(a) If - else statement.

Ans The syntax of an if-else statement in C programming language is-
if (boolean-expression).

/* Statement (s) will execute if the boolean expression is true X / $\{$ else {

/* statement (s) will execute if the boolean expression is false X / $\}$

(b) For loop

Ans For (initialization statement; test expression; update statement.

|| statements
 $\}$

(c) While loop

Ans While (condition) {
Statements;
 $\}$

(d) do - while loop

Ans do {
Statements
 $\}$ while (expression);

Q2 Find the output of the following program segments.

a)

```
#include <studio>
int main()
```

```
{
    int i;
    for (i=i; < 2; i++)
    {
        printf("GMS Ghaziabad\n");
    }
}
```

(b)

```
#include <studio>
int main()
```

```
{
    int i = 1;
    while (i <= 2)
    {
        printf("GMS Ghaziabad\n");
        i = i + 1;
    }
}
```

(c)

```
#include <studio>
void main()
```

```
{
    int a = 10, b = 100;
    if (a > b)
        printf("Largest number is %.d", a);
    else
        printf("Largest number is %.d", b);
}
```

Ans GMS Ghaziabad

GMS Ghaziabad largest number is 100