

CCA-101: FUNDAMENTALS OF IT &

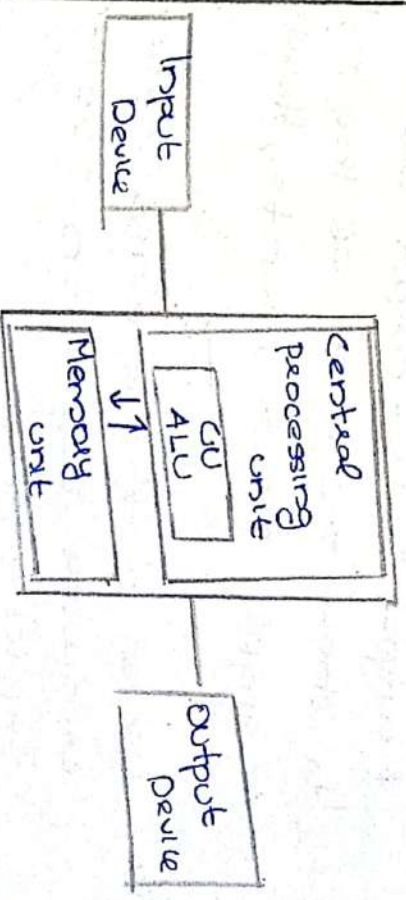
PROGRAMMING.

Assignment-1

Q1: what are the four fundamental parts of computer? explain it with the help of a diagram.

Ans: the four fundamental parts of a computer are,

- * Input Device
- * Central processing unit
- * memory unit
- * output Device



* Input Devices - It is used for

Communication between people and computer system and system use many devices for input purposes.

eg: mouse, keyboard, microphone etc

* Central processing unit - It is the brain of the computer. without this unit computer unable to process.

* memory unit - It is a collection of units or devices together. the memory unit stores the binary information in the form of bits.

* output Device - output Device is used to show the result of the instructions example monitor, printer, headphones etc

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

Ans:

The computers are classified into different groups based on their size and capacity.

* Super Computers

* Mainframe Computers

* Mini Computers

* Micro Computers.

o Super Computers - It is the most powerful and physically largest by size and it is the fastest supercomputers can perform over one trillion calculations in a second. It has thousands of processors.

o Mainframe Computers - this computers are very large often filling an entire room and can process thousands of millions of instructions per second these computers are mainly used

Flight scheduling, reservations and ticketing of air airline etc

- Mini Computers - Minicomputers are much smaller than mainframes.

These computers are also less expensive midrange computers are mainly used by small and medium sized business as their service.

- Micro Computers - It is the most frequently used type of computer, also known as Personal Computer (PC) a micro computer is small computer system designed to be used by one person at time.

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

Ans.

The each generation is characterized by dramatic improvements over the previous generation in the technologies used to build computer is called computer generation.

The five generations of a computer are,

* First Generation - Vacuum Tubes (1940-56)

The first computer systems used vacuum tubes for circuitry and magnetic drum for memory and were often enormous taking up entire rooms. These computers were very expensive to operate and in addition to using a great deal of electricity.

* Second Generation - Transistors (1956-63)

The world would see transistors replace vacuum tubes in the second generation of computers. It is the vast

Improvement over vacuum tubes.

Second generation computers still relied on punched cards for input and printout for output.

* Third Generation: Integrated Circuits (1964-71)

The development of the integrated circuit was the hallmark of the third generation of computers. Transistors were miniaturized and placed on silicon chips called semiconductors which drastically increased the speed and efficiency of computers.

* Fourth Generation: Microprocessors (1971-Present)

The microprocessor brought the fourth generation of computers as thousands of integrated circuits were built into a single silicon chip. In the first generation filled an entire room could now fit in the palm of a hand.

* Eighth Generation: Artificial Intelligence

Eighth generation computing devices based on artificial intelligence are still in development though there are some applications such as voice recognition that are being used today. The goal of the 8th generation is to develop devices that respond to natural language input and are capable of learning and self-organization.

Q4. Differentiate between Volatile & non-Volatile memories?

Ans: In a Volatile Memory, the process can both read and write it means that

the process would have direct access to the data and information. Although in a non-Volatile memory, the process can only read. It means that the processor won't have direct access to the data and information without it.

Q5. Distinguish among system software application software and open source software on the basis of their feature.?

Ans: System Software: It is a type of software that is designed to run a computer's hardware and Application programmes. Softwares like operating system, compilers, editors and Drivers etc come under this category. A computer cannot function without the presence of these.

Application Software: It is the software created for specific purpose, used by end users. It can be called an Application or simply an app. Example: word processor, accounting applications, a web browser etc.

open source software - It is a type of computer software in which source code is released under a license in which the copyright holder grants users the right to study, change and distribute the software to anyone and for any purpose. _____.

Q6. a) create a file in ms-word to insert paragraph about yourself and save it with file name 'yourself'. Describe all steps involved in it?

- b) write steps regarding followings
- to change font style
 - to change font colour
 - to change font size
 - to change (highlight) the line that reads "needs to get IM's address".

Ans: a) To create a paragraph in Microsoft word

- ° click the microsoft office button/file tab
- ° select new
- ° select the blank Document
- ° Now we can add text and heading
- ° left click the mouse. the insertion point appears
- ° type the paragraph ~~of~~ ^{about} yourself and give headings and corrects align
- ° To save file,
- ° click on ms office button or file tab
- ° select Save as
- ° select the location
- ° enter the name as "yourself" for the document
- ° click on publish/save button.

b) To change font style,

- * select the text you want to modify
- * click on font style box on home tab
- * then many various font style appear
- * left click the font style you want to use
- * then font style will change in document

To change font size,

Select the text you want to modify
click on increase/decrease font size commands in font group on home tab
then font size will change in the document.

To change font colour,

Select the text you want to modify
click on font colour box on home tab

- the various font colours appears.
- left click the font color you want to use.

then font color will change in Document

* to highlight in yellow

- move your mouse to location where you want to insert the text
- left click the mouse. the insertion point appears
- type "needs to get into address"
- select the text
- click on text highlight color in font group on home tab
- various colours will appear.
- click on yellow colour
- then the text highlight colour will change in document.

Q1.

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.

- click on microsoft office button / file tab
- select new
- select the blank Document
- left click the mouse. the insertion points appears
- type "MS word" and change font style into heading 1 and align to left
- then left click the mouse another insertion point appears
- type "ms word is a widely used command word processor developed by microsoft ms word is application software, which is table for"
- select 'ms word' from the text and change font color to red.
- select "word processor" from the text

- Click on underline command in the font group.
- Select the below "ms word" text
- Change the font style to italics in the font group.
- Then left click mouse, another intersection point appears and type type downwards.
- Creating,
editing,
saving and
printing any type of document.
- Select "Creating" from text change colour into blue.
- Select "Saving" from text change colour into red.
- Select "and" click on strike through in font group.
- and select "printing any type of document"

- Q6.
- change the font style to bold in font group.
 - and select all the above text.
 - click on bullets commands on home tab.
 - select Define bullet
 - click on symbol button.
 - click on font: dropdown box, and select a font category.
 - left click symbol to select.
 - click OK, to save file.
 - click on file tab, select save as
 - select location
 - enter the name as 'ms-word' for the document
 - click on Save button.
- Q7.
- Create a file in ms-word for the following document and save it with file name 'equations'. Describe all steps involved in it.

Ans. equations.

* $X_2 + Y_5 = 30$

- left click mouse, the intersection point appears,
- type $X_2 + Y_5 = 30$
- select '2' in the text
- click on subscript command on home tab
- select '5' in the text
- click on subscript command.
- click ok.

* $Z_3 + Q_4 = 50$

- left click mouse, the intersection point appears
- type $Z_3 + Q_4 = 50$
- select the '3' in the text

• click on superscript command on home tab

• select '4' in the text.

• click on superscript command.

• click ok.

* $A_2 + B_8 = X_2 + Y_8$

- left click mouse, the intersection point appears,
- type $A_2 + B_8 = X_2 + Y_8$
- select '2' in text and change into ~~sub~~ subscript command.
- select '8' in text and change into superscript command.
- select ~~2~~ '2' and '8' again in the text do as same.
- click on ok.

Q9.

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

Select the text you want to convert
select an insert tab
Click on table command. A dialog box appears
Click on convert text to table, a new dialog button appears
here set numbers of columns
Click on ok finally selected text convert in a table.

Ans.

Click on microsoft office button/
file tab.
select new
select the blank Document
select the above file ~~copy~~
copy and paste to new Document

Select the text

select insert tab

click on table command.

click on convert text to table

here select the columns to 2

click on ok

finally selected text convert in a table.

to save file,

click on file tab

select save as

select the location

enter the name as 'text-to-table'

for the document

click on save button.

Q10)

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

Ans.

- Click on Microsoft Office button / file tab
- Select New
- Select the blank Document
- place your insertion point in the document where you want to insert a table
- select the insert tab
- click the table command
- Drag your mouse over diagonals squares to select the number of columns and rows in the table
- left click mouse, and table appears in the Document
- enter text in the table

Q 11)

create a following worksheets in ms excel and save it with name 'book 1'.

Ans. • open Microsoft excel

• click on file tab

• select new, a new blank worksheet appears

• left click on cell A1, type

Roll no

1
2
3
4
5
6
7
8
9
10

• left click on cell B1, type

name

n1
n2
n3
n4
n5
n6
n7
n8

• Right click on C1, type

marks

60
70
80
90
100
50
177
44
88
55

Click on File tab

Click on Save as, select location

~~Save~~ change file name into 'book1'

click on save button.

Q12.

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

> the sum of mark using Autosum in range of cells (C2:C11)

> average of mark in range of cells (C2:C11)

Ans:

1) = SUM (C2:C11)

2) = AVERAGE (C2:C11)

3) = MAX (C2:C11)

4) = MIN (C2:C11)

Q.13a

Describe Various steps involved in the following.

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

Ans.

1) To Modify Column Width

Left Click the column heading of a column you want to modify
Click on Format command
Select Column width to enter measurement.

Select Absolute colour values to
Adjust the colour so all the text
will fit.

* To Modify Row Height

Position the cursor over the row
line you want to modify
left click the mouse then drag
the cursor upward to decrease the
row height or downward to increase
the row height.
Release the mouse button.

* To Delete rows And columns

Select the rows or columns you
want to delete.
click on Delete command.

Describe following terms in a worksheet
absolute reference and relative reference

cell address.

Ans:

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

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

Q14a) what tools are available to customize
our powerpoint presentation?

Ans: templates

transitions
Animations
slide shows
Design
clip art
while the steps for following action
or powerpoint presentation.

* Open a blank Document:

- click on Start
- select ms office powerpoint
- Double click on it.
- new Document will appear.

* Save Presentation as lab1.pptx.

- click on file.
- click on save as, select location
- enter file name lab1.pptx
- click on save button.

* Add a title to the 1st slide

- click on file, create new Document
- new Document will appear.
- Double click the 1st heading
- ~~Remove~~ Remove and type the name of collage.

* Type your 1st name and last name

- Double click on the subtitle text
- Remove and type our 1st and last name in it.

* Add a new slide with a title and content.

- click home, layout
- then click on new slide button
- the title and content appears.

Q.15 will steps for creation of a set of powerpoint slides that demonstrates your skill to use the tools of powerpoint

It should include the following things.

- * the slide & bullet list
- * inserting Excel sheet
- * cap cut and text
- * slideshow effects.

Ans: *

Bullet list.

- on View tab, click normal
- click in the text box or placeholder where you want to add bulleted or numbered text.
- on home tab, in the paragraph group, click the bullets or Numbering.

* Inserting Excel Sheets.

- Select Insert tab & click the Insert tab.
- Click the Object command in the text group.
- A dialog box appears.
- Locate the select the desired Excel file, then click Insert.

* Clip Art and Text.

- Click on Slide where you want to insert a clip art file.
- On Insert tab, in the Images group click Online Pictures / Clip art.
- In the Insert picture dialog box enter the search items and press enter.
- Locate the clip art you want to insert in your slide and Double click on it.

* Slide Show Effects

- Select the object or text you want to animate.
- Select animations and choose an animation.
- Select effect option and choose an effect.
- Press Enter.

PART - 2

Q16. What is the difference between machine language and high level language?

Ans: High level languages are human

friendly. they are thus very easy to understand and learn by any Programme low level languages are machine friendly they are thus very difficult to understand and learn by any human.

Q14 Discuss about different data types of C programming language

Ans: Char - the most basic data type in C. It stores a single character and requires a single byte of memory in almost all compilers

int - As the name suggests, or integer variable is used to store an integer

float - It is used to store decimal numbers

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

Q15 Find the output of the following expressions.

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

Ans: $30 + 5 - 20 / 5 * 2 = 62$

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

Ans: $10 - 10 + 30 = 30$

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

Ans: $10 - 6 = 4$

Q19.

a)

Describe the syntax of following statements
if-else statement

if (expression)

{
true block of statements;

}

else

{
else block of statements;

}

b)

do-while loop

do { expression 1; expression 2; expression 3;

{
block of statements;

}

9) while loop

while (condition)
single statements;

or

while (condition)
{
block of statements;
}

d)

Do-while loop

do
{
single statement
}
or
block of statements
{ while (condition);
}

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

a)

```
#include <stdio.h>
int i=1;
while (i<=2, i++)
{
    printf("MS Chazia bad");
}
```

b) #include <stdio.h>

```
int main()
{
    int i=1;
    while (i<=2)
    {
        printf("MS Chazia bad");
        i=i+1;
    }
}
```

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);
}
```

Ans.

a)

MS Chazia bad

b)

MS Chazia bad
MS Chazia bad

c)

largest number is %d\n", b);