

**CERTIFICATE IN COMPUTER
APPLICATION(CCA)
CCA -101 : FUNDAMENTALS OF IT &
PROGRAMMING
ASSIGNMENT**

NAME : - ANSHU KUMARI

FATHER'S NAME :- SHRI AJIT KUMAR CHAUDHARY

ADDRESS : - CSC ACADEMY MATHURAPUR

D.O.B : - 02/10/2003

EMAIL ID : - KAJIT 3712@GMAIL.COM

CONTACT NO.: - 7979892259

DATE : - 13/04/2021

Anshu Kumari
SIGNATURE : - 

Fundamentals of IT & Programming Assignment

Q.1. What are the four fundamental parts of computer? Explain it with the help of diagram.

Ans. → The four fundamental parts of computer :-

- i) Input Device
- ii) Central processing Unit (CPU)
- iii) Memory Unit
- iv) Output Device

i) Input Device :-

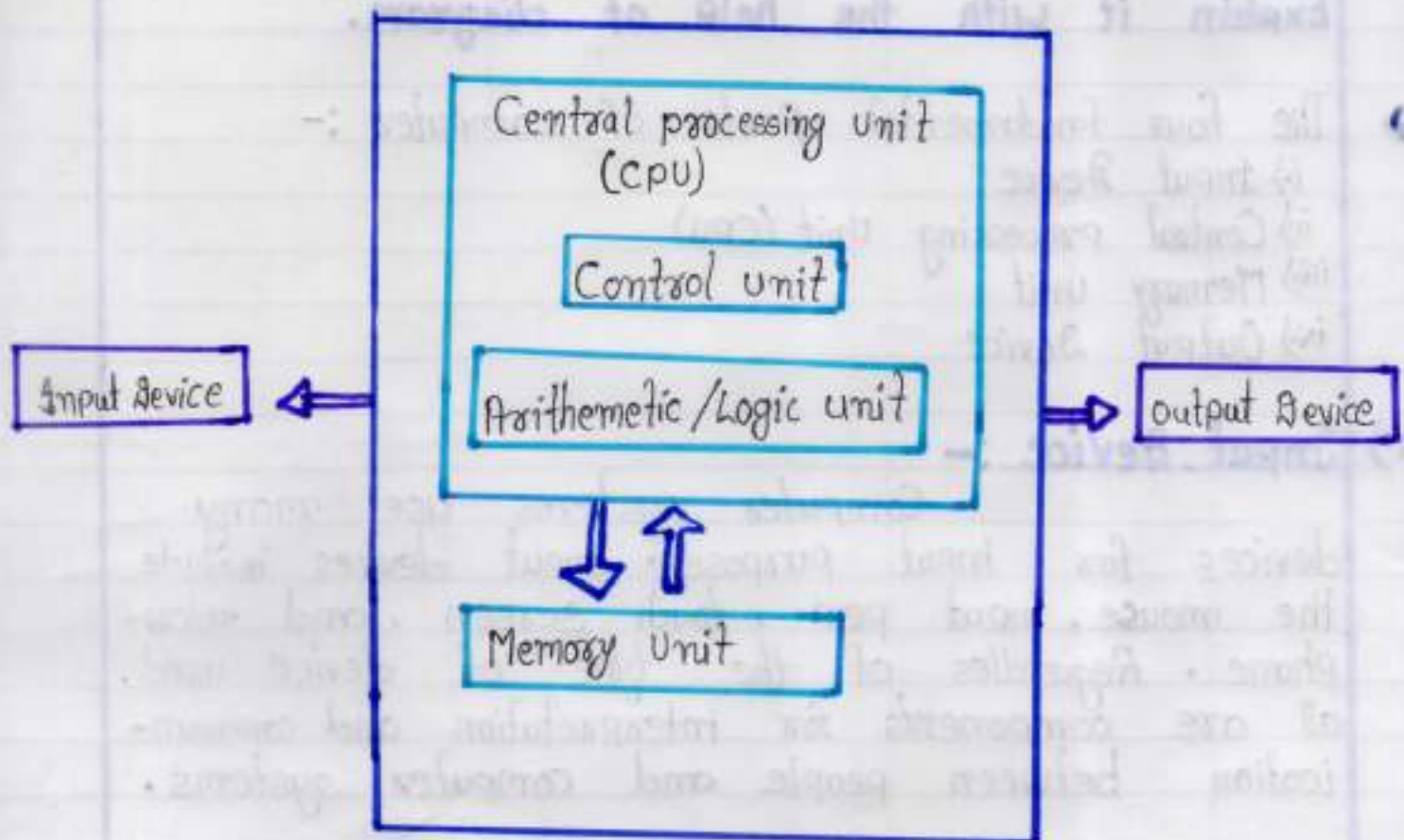
Computer systems use many devices for input purpose. Input devices include the mouse, input pen, touch screen, and microphone. Regardless of the type of device used, all are components for interpretation and communication between people and computer systems.

ii) Central processing unit (CPU) :-

It is the brain of the computer without this unit computer unable to process.

iii) Memory unit :-

A memory unit is the collection of storage units or devices together. The memory unit stores the binary information in the form of bits.



iv.) Output Device :-

Output device is used to show the result of the instructions.

Examples :- Monitors, printer, Headphones etc.

* * * * *

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

Ans. → ✓ Classification of computers:

Based on size and capacity, computers are classified as follows:

- Super computers
- Mainframe computers
- Mini computers
- Micro computers

➤ Super computers :-

Supercomputers are the most powerful and physically the largest by size. These are systems designed to process huge amounts of data and the fastest supercomputers can perform over one trillion calculation in a second. Supercomputers have thousands of processors. Because of their extraordinary speed, accuracy and processing power, supercomputers are well suited for solving highly complex problems and performing tasks that demand huge amounts of calculations.

➤ Mainframe computers :-

Mainframe computers are very large often filling an entire room and can process thousands of millions of instructions per second. In a Mainframe

environment, users connect to the Mainframe through the many terminals wired to the mainframe. Mainframes are capable of supporting hundreds to thousands of users simultaneously. Some of the functions performed by a Mainframe include: flight scheduling, reservation and ticketing for an airline etc.

► Mini computers :-

Minicomputers are much smaller than mainframes. These computers are also less expensive. Sometimes referred to as Midrange server or Midrange computer, they are typically larger, more powerful and more expensive than desktop computers. Midrange computers are usually used by small and medium-sized businesses as their servers. Users connect to the server through a network by using desktop computers.

► Microcomputers :-

Microcomputers are the most frequently used type of computer. Also, known as personal computer (PC), a microcomputer is a small computer system designed to be used by one person at a time.

Q.3: What is the meaning of computer generation? How many Computer Generations are defined? What technology were/are used?

Ans. → The meaning of computer Generation :- Each generation is characterized by dramatic improvements over the previous generation in the technology used to build computers in terms of the internal organization of computer and programming languages.

Five Generations of computers :-

- First Generation
- Second Generation
- Third Generation
- fourth Generation
- Fifth Generation

• First Generation :-

The first computer systems used Vacuum tubes for circuitry and magnetic drums 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, the first computers generated a lot of heat, which was often the cause of malfunctions.

first Generation computers relied on machine language, the lowest-level programming language understood by computers, to perform operations and they could only solve one problem at a time. It would take operators days or even weeks to set-up a new problem. Input was based on punched cards and paper tape, and output was displayed on printouts.

The UNIVAC (Universal Automatic computer) and ENIVAC (Electronic Numerical Integrator and computer) computers are examples of first-generation computing devices.

The UNIVAC was the first commercial computer delivered to a business client, the U.S. Census Bureau in 1951.

Second Generation :-

The world would see transistors replace vacuum tubes in the second generations of computers. The transistor was invented at Bell Labs in 1947 but did not see widespread use in computers until the late 1950s.

The transistor was far superior to the vacuum tube, allowing computers to become smaller, faster, cheaper, more energy-efficient and more reliable than their first-generation predecessors. Though the transistor

still generated a great deal of heat that subjected the computer to damage. It was a vast improvement over the vacuum tube. Second generation computers still relied on punched cards for input and printouts for output. Second-generation computers moved from cryptic binary machine language to symbolic, or assembly language.

◎ Third Generation :-

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.

Instead of punched cards and printouts, users interacted with third generation computers through keyboards and monitors and interacted with an operating system, which allowed the device to run many different applications at one time with a central program that monitored the memory. Computers for the first time became accessible to a mass audience because accessible they were smaller and cheaper than their predecessors.

④ Fourth Generation :-

The microprocessors brought the fourth generation of computers, as thousands of integrated circuits were built onto a single silicon chip, what in the first generation filled an entire room could now fit in the palm of the hand. The Intel 4004 chip, developed in 1971, located all the components of the computer - from the unit and memory to input/output controls - on a single chip.

In 1981 IBM introduced its first computer for the home user, and in 1984 Apple introduced the Macintosh. Microprocessors also moved out of the realm of desktop computers and into many areas of life as more and more everyday products began to use microprocessors.

As these small computers became more powerful, they could be linked together to form networks, which eventually led to the development of the Internet. Fourth generation computers also saw the development of GUIs, the mouse and handheld devices.

◎ Fifth Generation :-

Fifth 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 use of parallel processing and superconductors is helping to make artificial intelligence a reality.

Quantum computation and molecular and nanotechnology will radically change the face of computers in years to come. The goal of fifth generation computing is to develop devices that respond to natural language input and are capable of learning and self-organization.

Used technologies in computer generation :-

- ◎ first Generation → Vacuum Tubes (1940 - 1956)
- ◎ Second Generation → Transistors (1956 - 1963)
- ◎ Third Generation → Integrated circuits (1964 - 1971)
- ◎ fourth Generation → Microprocessor (1971 - Present)
- ◎ fifth Generation → Artificial Intelligence
(Present and Beyond)

* * * * *

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

Ans. → The important difference between volatile & Non-volatile memories :—

Volatile	Non-Volatile
i. Volatile memory is the type of memory in which data is lost as it is powered off.	i. Non-Volatile memory is the type of memory in which data remains stored even if it is powered-off.
ii. Contents of volatile memory is stored temporarily.	ii. Contents of Non-volatile memory is stored permanently.
iii. It is faster than non-volatile memory.	iii. It is slower than volatile memory.
iv. RAM is an example of volatile memory.	iv. ROM is an example of non-volatile memory.
v. In volatile memory, data can be easily transferred in comparison to non-volatile memory.	v. In non-volatile memory, data can not be easily transferred in comparison to volatile memory.
vi. In volatile memory, Process can read and write.	vi. In Non-volatile memory, Process can only read.
vii. Volatile memory generally has less storage capacity.	vii. Non-volatile memory generally has more storage capacity.
viii. Volatile memory is more costly per unit size.	viii. Non-volatile memory is less costly per unit size.



Q.5: Distinguish among system software, application software and open source software on the basis of their features.

Ans. → System software :-

It is a type of software that is designed to run a computer's hardware and application program, software like operating systems, compilers, editors and drivers etc. come under this category. A computer cannot function without the presence of these. If we think of the computer system as a layered model, the system software is the interface between the hardware and users application.

Application software :-

It is software created for a specific purpose, used by end users. It can be called an application or simply an app.

Examples: Word processors, accounting application, a web browser, an email client, media player etc.

Open source software :-

Open source software (OSS) is a type of computer software in which source code is released under a

license in which the copyright holder grants users the rights to study, change, and distribute the software to anyone and for any purpose. The Linux operating system is the best-known examples of open source software technology.

Q.6: 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.

Ans. → ① Opening Ms-word :-

- click the start icon.
- Then point to all program.
- Then click microsoft office and
- Then click microsoft word.

Now, Create a file in Microsoft word.

- create the Microsoft office button / file tab.
- Select new, then new document dialog box appears.
- Select Blank document. It will be highlighted by default.
- A new Blank document appears in the word window.
- Now, you can create document by in text.
- finally save document.

Document - (about yourself).

You and me, know yourself better than anyone else, but writing about yourself can still be tough! When applying for scholarships or to college, ~~essay~~ about yourself prompts can

feel feel so general that they leave us
stumped. So we will show you write
about yourself, so that you can land
more scholarships.

To save document using save as command.

- click the MS-office button/file tab.
- Select the save as - word document.
- Select the location where you want to save the document using the drop-down menu.
- Enter name for the document "Yourself".
- Click the save button.

* * * * *

Q.6.b) 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 SMS's address".

Ans. → ▶ To change the font style.

- 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 in the document.

▶ To change the font size.

- Select the text you want to modify.
- Click on font size ~~drop-down~~ box in the font group on the Home tab. The font size drop-down menu appears.
- 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 document.

➤ To change the font color.

- Select the text you want to modify.
- click on the font color box on the Home tab. The font color menu appears.
- Move your cursor over the various font colors.
- Left click the font color you want to use.
- Then font color will change in the document.

➤ To highlight (in yellow) the line that reads "need to get SMS's address".

- Select the text "need to get SMS's address".
- click on the text highlight color in font group on the Home tab.
- Various colors will appear.
- Move your cursor over the various colors.
- click on yellow color you want to use.
- Then text "need to get SMS's address" highlight color will change in the document.



9.7. 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 word processor developed by Microsoft. Ms word is application software, which is capable of

- Creating.
- editing,
- Saving.
- Printing any type of document.

Ans. → Opening Ms-word :-

- click the start icon.
- Then point to all program.
- Then click Microsoft office and
- Then click Microsoft word.

Now,

Create a file in Microsoft word:

- create the Microsoft office button / file tab.
- Select new, then new document dialog box appears.
- Select Blank document appears. It will be highlighted by default.
- A new Blank document appears in the word window.

- Now, You can create document by in text.
- finally save document.

Write document :-

Ms - word .

Ms-word is a widely used commercial word processor development by Microsoft.

Ms-word is application software, which is capable of -

- creating.
- editing.
- Saving.
- Printing any type of document.

Now, To save document using save As command:

- click the Ms-office button / file tab.
- 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 'ms-word'.
- click the save button.

* * * * *

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

Equations

$$x_2 + y_5 = 30$$

$$z^3 + q^4 = 50$$

$$A_2 + B^3 = x_2 + y^6$$

Ans.→ Opening Ms-word.

- click the start icon.
- Then point to all program.
- Then click Microsoft office and
- Then click Microsoft word.

Now,

create a file in Microsoft word.

- click the Microsoft office button/file tab.
- Select new, then new document dialog box appears.
- Select Blank document. It will be highlighted by default.
- A new Blank document appears in the word window.
- Now, you can create document by in text.
- finally save document.

Write document :-

Equations

$$x_2 + y_5 = 30$$

$$z^3 + q^4 = 50$$

$$A_2 + B^8 = x_2 + y^8$$

Now,

To save document using save As command:

- click the Ms-office button / file tab.
- 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 ^{Eq} 'equations'.
- click the save button.

* * * * *

Q.9. 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.



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.

Ans. → Opening Ms-word.

- click the start icon.
- Then point to all programs.
- Then click Microsoft office and
- Then click Microsoft word.

Create a file in Microsoft word.

- Create the Microsoft office button / file tab.
- Select the new, then new document dialog box appears.
- Select Blank document. It will be highlighted by default.
- A new Blank document appears in the word window.
- Now, you can create document by in text.
- finally save document.

Now, To ~~create~~ convert existing text to 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.

Highlighted text convert to table as shown:-

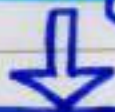
Select the text you want to convert
Select the insert tab.

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.



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.

To save document using of save As command:

- click the Ms-office button / file tab.
- 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 "text-to-table".
- click the save button.

* * * * *

Q.10. Create a file in Ms-word to insert a table in the document. Describe all steps involved in it.

Ans. → Opening Ms-Word.

- click the start icon.
- Then point to All programs.
- Then click Microsoft office and
- Then click Microsoft word.

Create a file in Microsoft word.

- create the Microsoft office button/file tab.
- Select the new, then new document dialog box appears.
- Select Blank document. It will be highlighted by default.
- A new Blank document appears in the word window.
- You can create document by in text.
- finally save document.

Insert a blank 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 columns and rows in the table.

- Left-click your mouse and the table appears in the document.
- Enter text into the table.

Q.11. Create a following worksheet in Ms-excel and save it with name 'book1'.

book1.			
	A	B	
1	Roll no.	Name	marks
2	1	n_1	60
3	2	n^2	70
4	3	n^3	80
5	4	n^4	90
6	5	n^5	400
7	6	n^6	50
8	7	n^7	77
9	8	n^8	44
10	9	n^9	88
11	10	n^{10}	55
12			
13			
14			
15			

Ans. → Starting a Excel.

- Click on the start button on the Taskbar at the bottom left corner of the screen.
- Highlight the All program item. The program menu will appear.
- Select Microsoft office from the list of programs.
- click on Microsoft Excel.

To create a new blank worksheet.

- Left-click the Microsoft Office button or file tab.
- Select new. The new worksheet dialog box appears, and Blank worksheet is highlighted by default.
- click on this.
- A new blank worksheet appears in the window.

Now, create a following worksheet in Ms-Excel

✓ This worksheet is Back page.

To save workbook using save 'As' command:

- click the Microsoft Office button or file tab.
- Select save As.
- Select the location where you want to save.
- Enter a name for the workbook "Book 1".
- click the save button.

Following worksheet.

File Book 1.

	A	B	C
1	Roll no.	Name	Marks
2	1	m ₁	60
3	2	m ₂	70
4	3	m ₃	80
5	4	m ₄	90
6	5	m ₅	40
7	6	m ₆	50
8	7	m ₇	77
9	8	m ₈	44
10	9	m ₉	88
11	10	m ₁₀	55
12			
13			
14			
15			
16			

Q.12. Calculate the following things of a range (C2:C11) of data in the worksheet created in question no 10.

- The sum of the marks using Autosum in a range of cells (C2:C11)
- Average of the marks in a range of cell (C2:C11)
- Highest marks in a range of cells (C2:C11)
- Minimum marks in a range of cells (C2:C11)

Ans. → **The sum of the marks in a range of cell (C2:C11)**

SUM → calculates the sum of range of cells together

Formula: = Sum (cell range) |

= Sum (C2:C11) [To add up the total]

Answer = 807

➤ **Average of the marks in a range of cell (C2:C11)**

Average → calculates the average of range of cells.

Formula: = ~~sum~~ Average (cell range)

= Average (C2:C11)

Answer = 80.7

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

Max → identifies the largest number in a range of cells

Formula: = Max (cell range) : = Max (C2:C11) : Answer = 99

➤ **Minimum marks in a range of cells (C2:C11)**

Min → identifies the smallest number in a range of cells

Formula: = Min (cell range) : = Min (C2:C11) : Answer = 60

A	B	C
Roll no.	Name	Marks
1	N ¹	70
2	N ²	90
3	N ³	80
4	N ⁴	60
5	N ⁵	85
6	N ⁶	95
7	N ⁷	75
8	N ⁸	65
9	N ⁹	88
10	N ¹⁰	99
11		
12		
13		
14		
15		

Q.13.e) Describe various steps involved in the following.

- ▶ To modify column width of a worksheet.
- ▶ To modify the row height of a worksheet.
- ▶ To delete rows and columns of a worksheet.

Ans. → ▶ To modify column width of a worksheet.

- Position the cursor over the column line in the column heading.
- and a double arrow will appear:
- Left-click the mouse, then drag the cursor to the right to increase the column width or to the left to decrease the column width.
- Release the mouse button.

▶ To modify ~~column~~ the row height of a worksheet.

- Position the cursor over the row line you want to modify, and a double arrow will appear.
- 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 of a worksheet.

- 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 in formula
➤ Cell address

Ans.→ ➤ Absolute reference in formula and relative reference in formula.

- Relative reference ;

cell reference in formula automatically adjust to new locations when the formula is posted into different cells. This is called a relative reference.

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

- An absolute reference solve this problem.

- Absolute Reference ;

cell reference in a formula always refer to the same cell or cell range. If a formula is copied to a different location, the absolute reference remains the same.

➤ 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.) What tools are available to customize our powerpoint presentation?

Ans. → Many tools are available to customize our powerpoint presentation :-

1. Home :-

The home tab holds the cut and paste features, font and paragraph options, and what you need to add and organize slides.

2. Insert :-

click Insert to add something to a slide, This includes pictures, shapes, charts, link, text boxes, video and more.

3. Design :-

On the Design, tab, you can add a theme or color scheme, or format the slide background.

4. Transitions :-

Set up how your slides change from one to the next on the Transitions tab. Find a gallery of the possible transitions in the transitions to this slide group - click more of the slide of the gallery to see all of them.

5. Animations :-

Use the Animation tab to choreograph the movement of things on your slides. Note that you can see many possible animation in the gallery in the Animation group, and see name of theme by clicking more.

6. slide show :-

On the slide show tab, set up the way that you want to show your presentation to others.

7. Review :-

The Review tab lets you add comments, run spell-check, or compare one presentation with another (such as an earlier version).

8. View :-

Views allows you to look at your presentation in different ways, depending on where you are in the creation or delivery process.

9. File :-

At one end of the ribbon is the file tab, which you use the behind the scenes stuff you do with a file, such

as opening, saving, sharing, exporting, printing and managing your presentation. click the File tab to open a new view called the Backstage.

click from the list on the side to do what you want to do; for example, click print to find the options and setting for printing your presentation. click Back to return to the presentation that you were working on.

10. Tools tabs:-

When you click some parts of your slides, such as pictures, shapes, SmartArt or text boxes, you might see a colourful new tab appears.

In the example above, the Drawing Tools tab appears when you click a shape or text box.

When you click a picture, the picture tools tab appears. other such tabs include SmartArt Tools, charts Tools, Table tools and Video tools. These tabs disappear or change when you click something else in your presentation.

- Q.14.b.) Write the steps for the following action for creation of powerpoint presentation
- Open a Blank presentation
 - Save the presentation as Lab1.pptx.
 - Add a Title to the first slide: the name of your college
 - Type your first name and last name in the subtitle section
 - Add a new slide which has a Title and Content.

- Ans.→
- Open a Blank presentation.
 - Select the file tab to go to Backstage view.
 - Select New, on the left side of the window.
 - then, click Blank presentation.
 - Save the presentation as Lab1.pptx.
 - Step 1 → click on the file tab to launch the Backstage view and select save.
 - Step 2 → In the save As dialog, type in the file name and click "save".
 - Step 3 → The default file format is 'pptx'. If you want to save the file with a different name, choose one of the file types from the "Save as type" dropdown list.
 - Add a Title to the first slide: the name of your college.
 - Select the file tab to go to Backstage view.

- Select New on the left side of the window
- then, click Blank presentation. additional information on how slides can be used.
- then, Open the first slide.
- click the title bar.
- Type the name of my college "K.S.R.I college".

➤ Type your first name and last name in the subtitle section.

- Select the file tab to go to Backstage view.
- Select New on the left side of the window
- Additional information on how the template can be used.
- click on Blank presentation
- Then, Open the subtitle section.
- Type the first name in subtitle "Anokhi" and
- Type the last name in the subtitle section "Kumari".

➤ Add a new slide which has a Title and content.

- To insert a new slide that contains a "Title and content" slide layout, click the "Home" tab in the Ribbon.
- Then, click the "New slide" button in the "slides button group."
- To insert a new slide and choose the slide layout, click the drop-down part of this button.
- Doing this then shows a drop-down menu that displays the different slide layouts you can apply.
- Then click one of the slide layouts in the drop-down menu to create a new slide with that layout.

Q.15. Write 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

- ▶ Title slide & bullet list
- ▶ Inserting Excel sheet
- ▶ clip Art and Text
- ▶ slide show effects

Ans. → ▶ Title slide & bullet list :-

1. Start Microsoft powerpoint.
2. Open arbitrary existing powerpoint presentation.
3. click the New Slide button on the Formatting toolbar.
 - The slide layout task pane appears as shown in the above figure. The slide layout task.
 - pane lets you select from numerous layout that determine what you want to appear on.
 - The new slide. We want to add a Bulleted list slide.
4. Click the Bulleted List Layout, as shown in the above figure.
 - A new slide appears after the current slide in your presentation as shown in the figure.

- Notice there are two placeholders on this slide: one for the title of the slide and the
 - Other for the bulleted list. To add text to a placeholder, all you have to do is click and type.
- 5.) Click the title placeholder (where it says: "click to add title").
 - 6.) Type some text.
 - Now let's add some text to the bulleted list placeholder.
 - 7.) click the bulleted list placeholder and type something and press <Enter>.
 - Powerpoint adds another bullet to the list when you press the <Enter> key.
 - 8.) Repeat the following three times: Type some text and press <Enter>.
 - 9.) click the slide layout pane's close button.
 - If you are not planning to use the slide layout pane again for a while, it is usually a good idea to close it so you can have extra viewing space for your presentation.

➤ Inserting Excel sheet :-

1. In powerpoint, on the Insert tab, click on top object.
2. In the Insert object dialog box, select create from file.

3. Click on tab Browse, and in the Browse box, find the Excel workbook with the data insert and link to.
4. Before you close the Insert object box, select link and click OK.

➤ clip Art and text :-

1. click in the slide where you want to insert a clip art file.
2. On the Insert tab, in the Images group, click online pictures. (In powerpoint 2007/2010, this option is called clip Art.)
3. In the Insert pictures dialog box enter your search terms in the Bing.com field and press.
4. Your search results load in the task pane.
5. Locate the clip Art you want to insert in your slide and double-click on it or click the item and select Insert.

➤ slide show effects :-

1. You are going to need more than one slide.
2. There are a few ways you can add more slides.
3. Notice that there is a separate area to the left of the screen where your first slide is located.

4. The first way to add a slide is to right-click the area under where your first slide is located and select 'New slide'.
5. A New slide appears. add another slide it to click 'New slide' in the toolbar above the slides. This button is divided into two parts. The top will insert a new slide with a default layout. This is slide show effects.

* * * * *

Part-2

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

Ans. → Machine Language :-

A computer programming language consisting of binary instructions which a computer can respond to directly.

Sometimes it is referred to as machine code or object code, machine language is a collection of binary digits or bits that the computer reads and interprets. If computers cannot directly understand the programming languages used to create computer programs, so the program code must be compiled.

Example :- 01001000, 01100101, 01101100, 01101100 etc.

High - Level Language :-

A high-level language is any programming language that enables development of a program in a much more userfriendly programming context.

This language is a programming language with strong abstraction about the details of the computer in contrast to low level programming language (Assembly languages). Ex. → C, C++, Java.

Q.17. Discuss about different data types of C programming Language.

Ans. → Data type in C :-

Each variable in C has an associated data type requires different amounts of memory and has some specific operations which can be performed over it. Let us briefly describe them one by one:

Following are the examples of some very common data types used in C:

- **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, an int variable is used to store an integer.
- **float**: It is used to store decimal numbers (numbers with floating point value).
- **double**: It is used to store decimal numbers (numbers with floating point value but its range of values is high in comparison to float).

Q.18. find 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. → a.) $x = 20/5 * 2 + 30 - 5$

$$20/5 * 2 + 30 - 5$$

→ Perform the operations in Parentheses first, The division = $20/5 = 4$.

formula becomes

$$4 * 2 + 30 - 5$$

→ Next the multiplication takes place before the Addition, Multiply = $4 * 2 = 8$.

formula becomes

$$8 + 30 - 5$$

→ The Addition takes place before the subtraction, Addition = $8 + 30 = 38$.

formula becomes

$$38 - 5$$

→ Finally, $38 - 5 = 33$.

The final answer is 33.

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

$$30 - (40/10 + 6) + 10$$

→ Perform the operations in Parentheses first, The division = $40/10 = 4$.

formula becomes

$$30 - (4 + 6) + 10$$

→ The Autosum = $4 + 6 = 10$

formula becomes

$$30 - 10 + 10$$

→ The Autosum = $-10 + 10 = 0$

formula becomes

$$30 - 0$$

→ The subtraction = $30 - 0 = 30$
finally, $30 - 0 = 30$

The final answer is 30.

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

$$40 * 2 / 10 - 2 + 10$$

→ Perform the operations in
parentheses first, multiplication = $40 * 2$
= 80

formula becomes

$$80 / 10 - 2 + 10$$

→ The ^{division} Autosum takes place before
the Autosum, the division = $80 / 10 = 8$

formula becomes

$$8 - 2 + 10$$

→ The Autosum takes place before
the sum, the Autosum = $-2 + 10 = 8$

formula becomes

$$8 + 8$$

→ finally, the sum = $8 + 8 = 16$

The final answer is 16.

Q.19. Describe the syntax of the following statements.

- a.) if-else statement. b.) for loop.
c.) While loop. d.) do-while loop.

Ans. → a.) if-else statement:

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

Syntax.

```
if (expression)
{
    true Block of statements;
}
else
{
    else Block of statements;
}
```

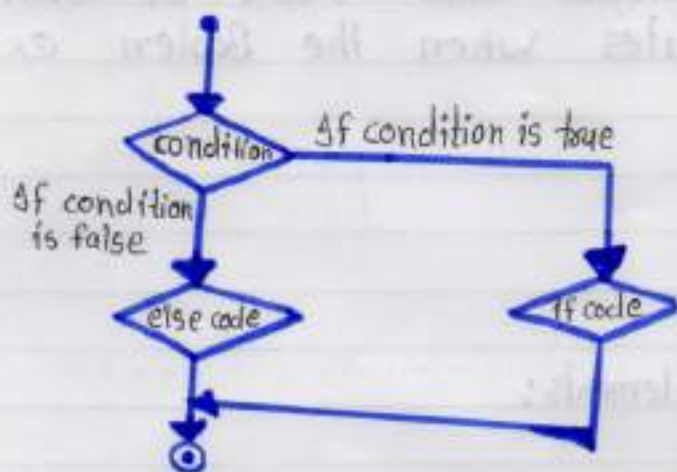
b.) for loop:

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

```
for (expression 1 ; expression 2 ; expression 3)
{
    Block of statements;
}
```

In the above syntax:

a) If-else statement:



- expression.1 - Initializes variables.
- expression.2 - Conditional expression, as long as this condition is true, loop will keep executing.
- expression.3 - expression 3 is the modifier which will increase or decrease the value of the variable.

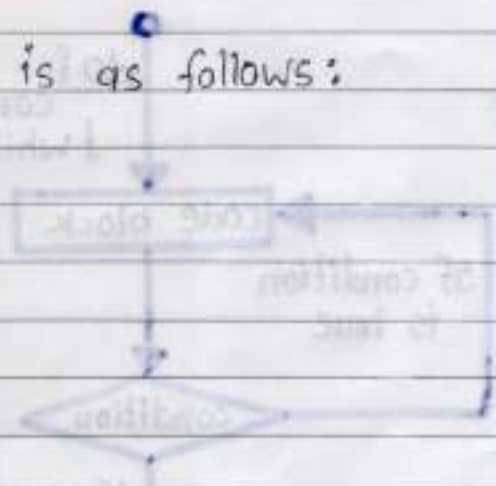
c.) While loop:

- Basic syntax of while loop is as follows:

```
while (condition)
    single statement;
```

OR,

```
while (condition)
{
    block of statements;
}
```



The above code can be represented in the form of a flow diagram as shown above.

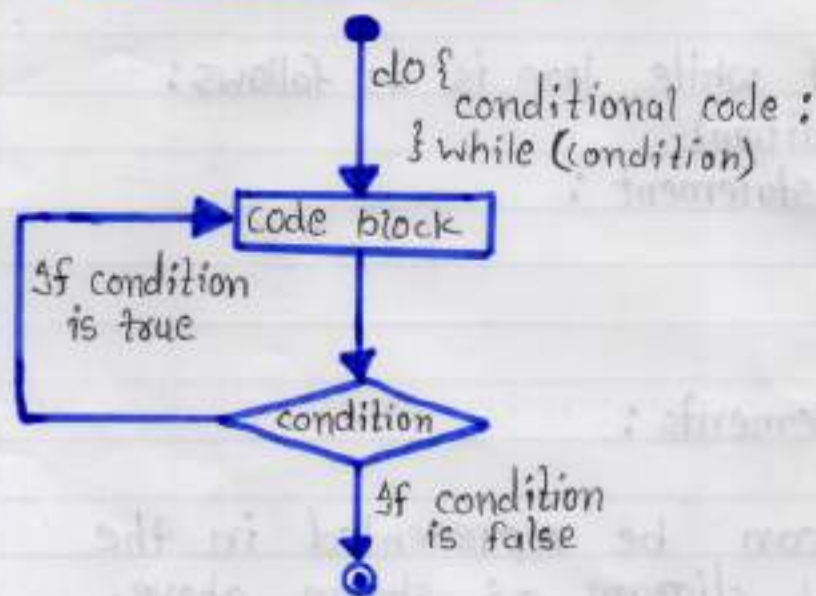
d.) do-while loop:

- do-while loop is just like a while loop except that the test condition is checked at the end of the loop rather than the start. This has the effect that the body of the loop are always executed at least once.
- Basic syntax of do-while loop is as follows:

```
do
{
    single statement
```

This code can be represented in the form of a flow diagram as shown below.

d.) do-while loop.



4.) do-while loop :

- do-while loop is just like a while loop except that the test condition is checked at the end of the loop rather than the start. This has the effect that the body of the loop are always executed at least once.
- Basic syntax of do-while loop is as follows:
do
{
single statement
}
while (condition);

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

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

IMS Ghaziabad

b) Output (while loop):

IMS Ghaziabad

IMS Ghaziabad

c) If.... else statement (output):

Largest number is 100.

* * * * *

a.)	b.)	c.)
<pre>#include <stdio.h> int main() { int i; for(i=1; i<2; i++) { printf("IMS Ghaziabad\n"); } }</pre>	<pre>#include <stdio.h> int main() { int i=1; while(i<=2) { printf("IMS Ghaziabad\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>
Output	Output	Output
IMS Ghaziabad	IMS Ghaziabad IMS Ghaziabad	Largest number is 100.
