ASSIGNMENT-1st

FUNDAMENTAL OF IT & PROGRAMMING

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

Ans. Keyboard:-Keyboard is a human interface device which is represented as a layout of buttons. Each button or key can be used to either input a character to a computer, or to call upon aparticular function of the computer

Mouse: - A mouse is a small handheld input device¬ that controls a computer screen's cursor or pointer in combination with the way it is moved

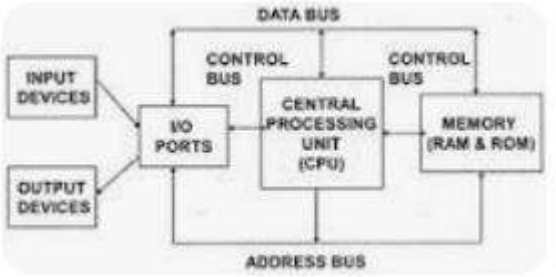
on a flat surface.

Monitor: - A computer monitor is an output device that displays information in user understandable form

CPU: - It is the brain of the computer.Computer cannot process without it.

Q2: Discuss about the classification of computers based onsize and capacity.

Ans. Computers are classified on different parameters, such as, storage capacity, processing speed and component (CPU) used in computers. Depending upon the components used and features of different computers, they are classified into four groups, Microcomputers, Minicomputers, Mainframe computers and Supercomputers.



Q3: What is the meaning of computer generation? How many Computer Generations are defined ? What technologieswere/are used?

Ans. First Generation: Vacuum Tubes (1940-1956):

- The first computer systems used vacuum tubes for circuitryand magnetic drums for memory
- These computers were very expensive to operate
- Computers of this generation consumed a lot of electricityCertificate in

Computer Applications (CCA)

cause

of malfunctions Example:

The UNIVAC (Universal Automatic Computer) The UNIVAC was the first commercial computer delivered to a business client, the U.S. Censu• First generation computers relied on machine language, the lowest-level programming language understood by computers to perform operations

- They could only solve one problem at a time. It would takeoperators days or even weeks to set-up a new problem

- Input was based on punched cards and paper tape, andoutput was displayed on printouts

- First computers generated a lot of heat ,which was often the sBureau in 1951

ENIAC (Electronic Numerical Integrator and Computer) computers

Certificate in Computer Applications (CCA)

 Second

Generation: Transistors(1956-1963):

- Transistors replaced vacuum tubes in the second generation of computers.

- 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

- Second-generation computers still relied on punched cards for input and printouts for output

- Second-generation computers moved from binary machine language to symbolic, or assembly language

Third Generation: Integrated Circuits(1964-

1971)

- The development of the integrated circuit was the hallmark ofthe third generation of computers

- Transistors were replaced by Integrated circuits, which drastically increased the speed and efficiency of computers.

- Instead of punched cards and printouts, users interacted withthird generation computers through keyboards and monitors

- Computers for the first time became accessible to a mass audience because they were smaller and cheaper than their predecessors.

Fourth Generation: Microprocessors (1971-

Present):

- The microprocessor brought the fourth generation of computers as thousands of integrated circuits were built onto asingle silicon chip
- What in the first generation filled an entire room could now fit in the palm of the hand
- In 1981, IBM introduced its first computer for the home user
- in 1984, Apple introduced the Macintosh.
- Microprocessors also moved out to the desktop computers
- Fourth generation computers also covered the development of Graphical User Interface (GUIs), mouse and hand held devices

- Quantum computation 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.

Q4: Differentiate between Volatile & Non- Volatile memories.

Ans. Volatile memory:- Volatile memory is a computer storage that only maintains its data while the device is powered.

Non volatile:- Non volatile memory is a type of computer memory that has the capability to hold saved data even if the power is turned off.

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

Ans. Software: - Software is a set of instructions used to operate computers and execute specific tasks.

The software is used extensively for different purpose in severaldomains. It can be categorized into different types. Software has mainly divided into two Categories:

1)System Software

2) Application Software

1)System Software

It is a type of software that is designed to run a computer's hardware and application programs.

- Software like operating systems, compilers , editors and drivers etc., come under this category.

- A computer cannot function without the presence of system software.

If we think of the computer system as a layered model, the system software is the interface between the hardware and user applications.

2) 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 processor, accounting application, a webbrowser, an email client, media player etc.

Q6. a) Create a file in MS-word to insert a paragraph aboutyourself and save it with file name

"yourself". Describe all steps involved in it.Ans. To create a

new blank document:

- Click the Microsoft Office button.

- Select New. The New Document dialog box appears.
- Select Blank document under the Blank and recent section. Itwill be highlighted

by default.

- Click Create. A new blank document appears in the Wordwindow

Click the Microsoft Office button.

- Select Save As Word Document. The Save As dialog boxappears.

Select the location where you want to save the document usingthe drop-down menu.

- Enter a name for the document.
- Select Save from the menu.

Click the Save button.

To use the Save command:

- Click the Microsoft Office button.

Q6 b) Write steps regarding followings

- **To change the font styleTo**
- **change the font size To change the font color**
- **To highlight (in yellow) the line that reads “need to getIMS’s address”.**

Ans. To change the font styleTo

format font size:

- Select the text you want to modify.
- Left-click the drop-down arrow next to the font size box onthe Home tab. The

font size drop-down menu appears.

- Move your cursor over the various font sizes. A live previewof the font size will

appear in the document.

- Left-click the font size you want to use. The font size willchange in the document.

To format font style:

- Select the text you want to modify.

- Left-click the drop-down arrow next to the font style box onthe Home tab. The

font style drop-down menu appears.

- Move your cursor over the various font styles. A live previewof the font will appear in the document.

- Left-click the font style you want to use. The font style willchange in the document.

To format font color:

- Select the text you want to modify.

- Left-click the drop-down arrow next to the font color box onthe Home tab. The font color menu appears.

- Move your cursor over the various font colors. A live previewof the color will appear in the document.

Q7. Create a file in MS-Word for the following document andsave it with file name 'ms word'. Describe

all steps involved in it.Ans

Ms word

Ms word is widely used commercial word processor developedby Microsoft

Ms word is application software, which it capable of

. Creating

. editing

. saving ~~and~~

. printing any type of documents.

Q8. Create a file in MS-word for the following document andsave it with file name 'equations'. Describe

all steps involved in it.

Ans. Equations $X_2 +$

$Y_5 = 30$

$Z^3 + Q^4 = 50$

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

Q9. Create a file in MS-word that convert existing highlighttext to table as shown below and save it as

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 Place your insertion point in the document where you wantthe table to appear.

- Select the Insert tab.
- Click the Table command.
- Drag your mouse over the diagram squares to select thenumber of columns and

rows in the table.

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

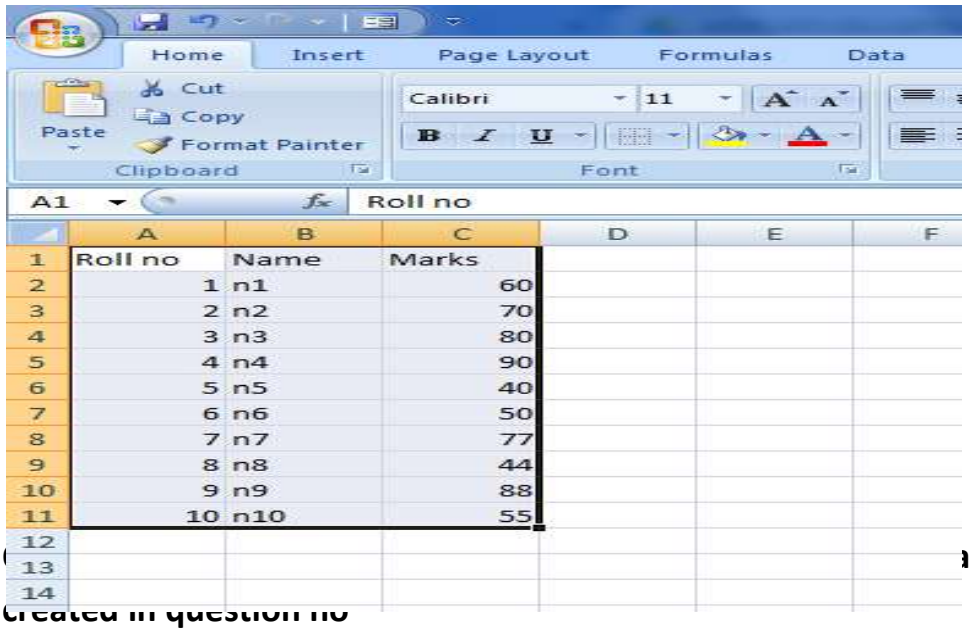
to insert a blank spreadsheet in Microsoft excelcreate a file

in ms excel

click here to office button

click to save button under office button

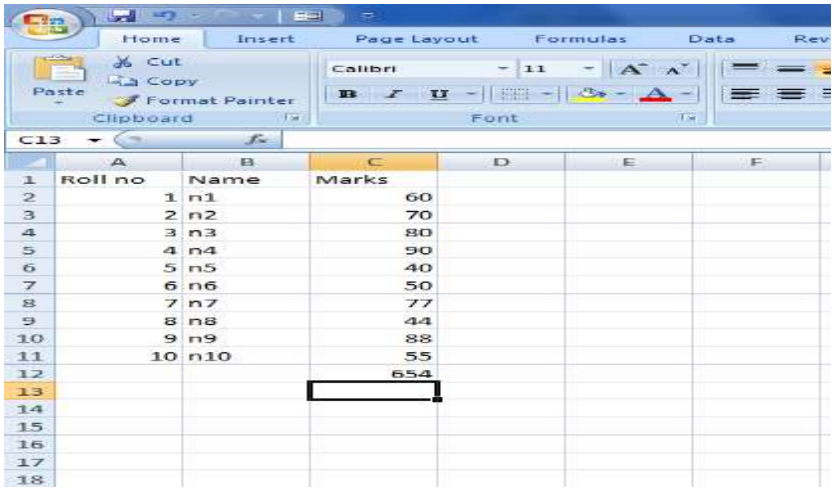
Q11. Create a following worksheet in MS-excel and save it with name 'book1'.



	A	B	C
1	Roll no	Name	Marks
2	1	n1	60
3	2	n2	70
4	3	n3	80
5	4	n4	90
6	5	n5	40
7	6	n6	50
8	7	n7	77
9	8	n8	44
10	9	n9	88
11	10	n10	55
12			
13			
14			

(ain the worksheet created in question no 10.

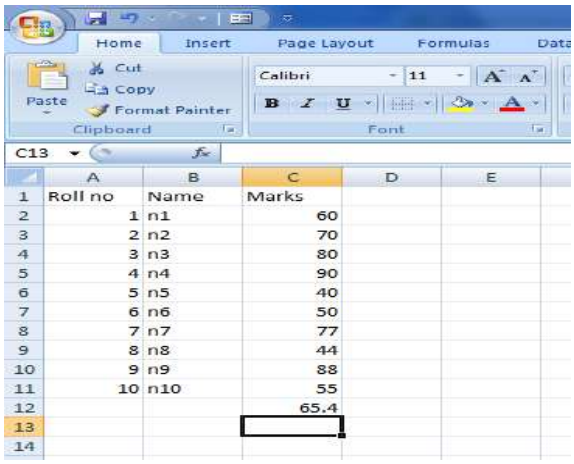
the sum of the marks using AutoSum in a range of cells(C2:C11)



	A	B	C	D	E	F
1	Roll no	Name	Marks			
2	1	n1	60			
3	2	n2	70			
4	3	n3	80			
5	4	n4	90			
6	5	n5	40			
7	6	n6	50			
8	7	n7	77			
9	8	n8	44			
10	9	n9	88			
11	10	n10	55			
12			654			
13						
14						
15						
16						
17						
18						

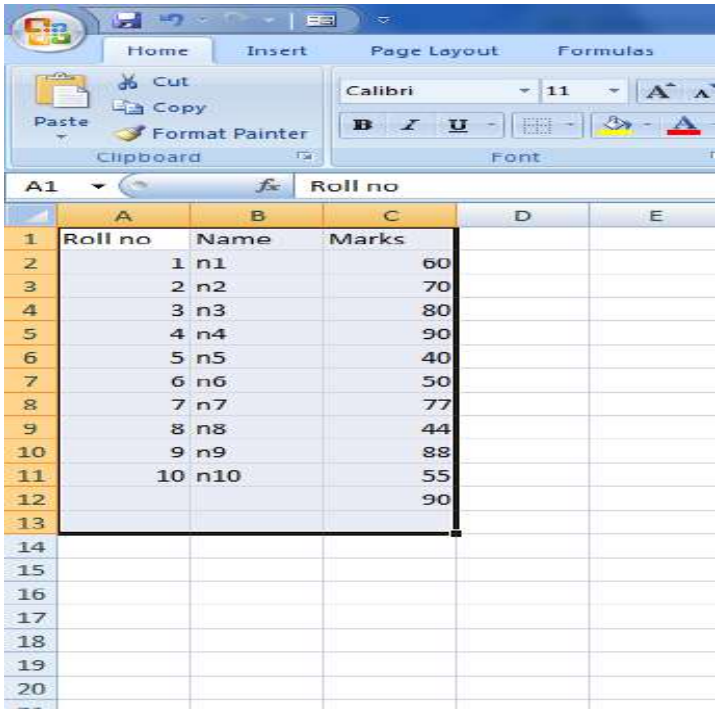
Ans. 654

average of the marks in a range of cells (C2:C11)



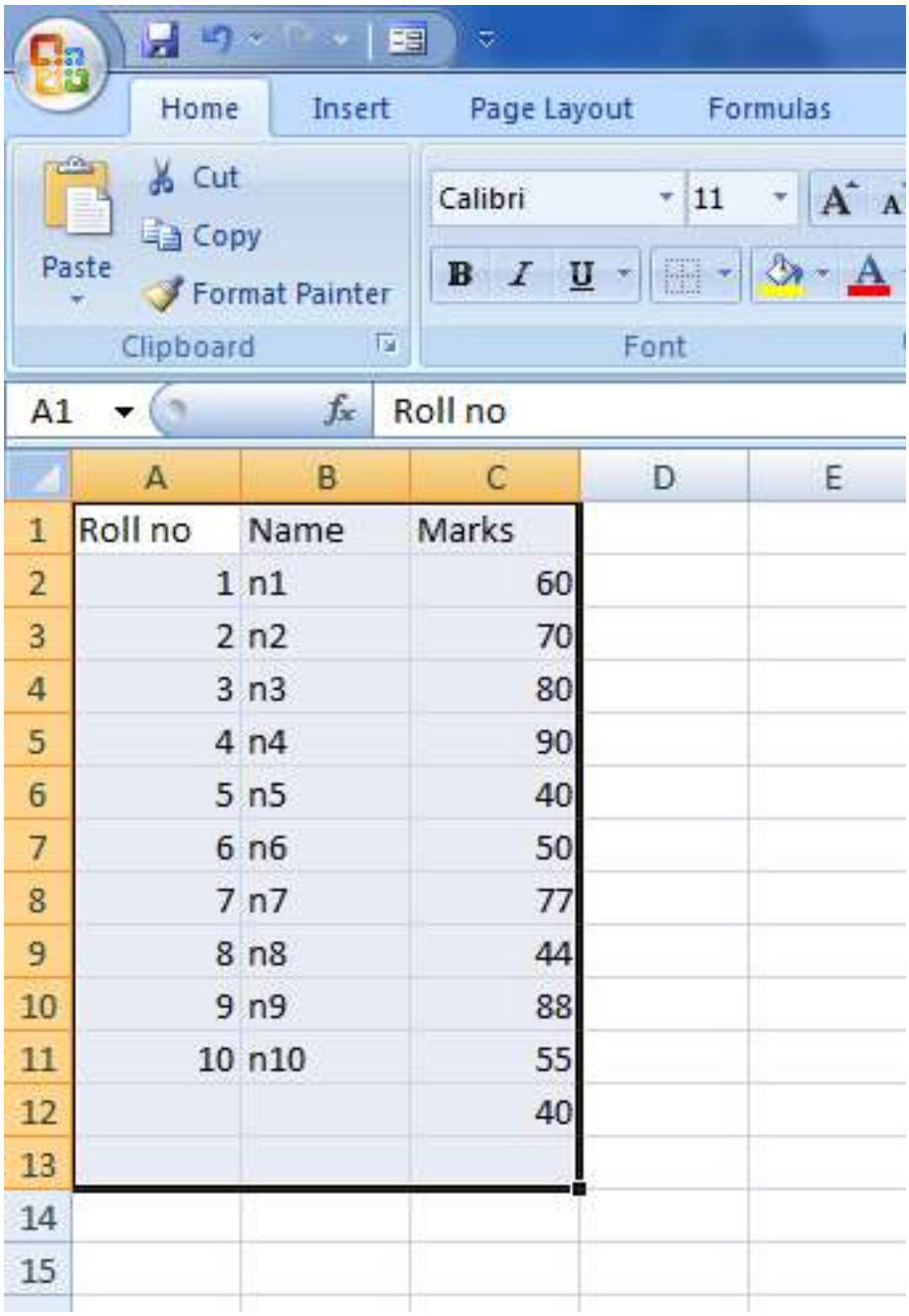
	A	B	C	D	E
1	Roll no	Name	Marks		
2	1	n1	60		
3	2	n2	70		
4	3	n3	80		
5	4	n4	90		
6	5	n5	40		
7	6	n6	50		
8	7	n7	77		
9	8	n8	44		
10	9	n9	88		
11	10	n10	55		
12			65.4		
13					
14					

highest marks in a range of cells (C2:C11)



Ans. 90

? minimum marks in a range of cells (C2:C11)



	A	B	C	D	E
1	Roll no	Name	Marks		
2	1	n1	60		
3	2	n2	70		
4	3	n3	80		
5	4	n4	90		
6	5	n5	40		
7	6	n6	50		
8	7	n7	77		
9	8	n8	44		
10	9	n9	88		
11	10	n10	55		
12			40		
13					
14					
15					

Ans. 40

Q13 a) Describe various steps involved in the followingTo modify

column width of a worksheet

Ans. **Set a column to a specific width**

1. Select the column or columns that you want to change.
2. On the Home tab, in the Cells group, click Format.
3. Under Cell Size, click Column Width.
4. In the Column width box, type the value that you want.
5. Click OK.

? To modify the row height of a worksheet

Ans. **Select the row or rows that you want to change.** On the Home tab, in the Cells group, click Format. Under Cell Size, click Row Height. In the Row height box, type the value that you want**.**

? To delete rows and columns of a worksheet

Ans. **To do this, select the row or column and then press theDelete key.**

1. Right-click in a table cell, row, or column you want to delete.
2. On the menu, click Delete Cells.
3. To delete one cell, choose Shift cells left or Shift cells up. To deletethe row, click Delete entire row. To delete the column, click Delete entire column.

Q13 b) Describe following terms in the worksheet

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, remainconstant no matter where they are copied**.**

Cell address

Ans. A reference is a cell's address**.** It identifies a cell or range of cellsby 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. The reference tells Formula One for Java to use the contents of the referenced cell(s) in the formula.

Q14. a) What tools are available to customize our PowerPointpresentation?

In this guide, we will discuss how you can make the most ofsome of the tools like:

- Templates and themes.
- Slide layouts.
- Fonts.
- Color themes.
- Many more.

Q14 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 sectionAdd a New Slide
- which has a Title and Content

Q15. Write steps for creation of a set of PowerPoint slides thatdemonstrates 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**

Q16. What is the difference between Machine Language andHigh Level Language?

Ans. To conclude, high-level languages are more friendly for the programmer because they use English-like statements in the codes, whereas low-level languages are more machine-friendly because theyuse binary language codes to write the computer instructions.

Q17. Discuss about different data types of C programmingLanguage.

Ans. Types of C programming language

There are four basic data types in C programming, namely **Char, Int, Float, and Double**.

Q18. Find the output of the following expressionsa) X=20/5*2+30-5 b) Y=30 – (40/10+6) +10

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

Ans. A - has symmetry, no lines, order 3. B - has symmetry, 1 line, no order. C - has symmetry, 1 line, noorder.