

FUNDAMENTALS OF IT & PROGRAMMING

ASSIGNMENT – I

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

There are four fundamental parts of computer

- CPU (Central Processing Unit)
- Monitor
- Keyboard &
- Mouse

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

Computer as classified as

- Super computer
- Mainframe computer
- Mini computer
- Micro computer

3. What is the meaning of computer generation? How many computer generations are defined? What technologies were/are used?

The evaluation of digital computing often divided into generation each generation is characterized by dramatic improvements of computer over the previous generation in the technology used to build a computer

There are five generation of computers as following:

- First generation (1941-56)
- Second generation (1956-63)
- Fourth generation (1964-71)
- Fifth generation (1971-present)

First generation is based on vacuum tubes and magnetic drums for memory, these type of computer is very expensive to use these is a big size of computer there are two examples UNIVAC d ENIAC.

Second generation computers is base on transistors, this is help to change a vacuum tubes in second generations.

Third generation computers based on integrated circuits this is a hallmark of this generation. This generation computers help to assessable to a mass audience because they are smaller cheaper than their predecessors.

Fourth generation computers based on microprocessors were it is built in to a single silicon chip what is the first generation filled a computer in a entire room now it is fit in the palm oh hand

Fifth generation computer based on artificial intelligence, are still developing this is capable to learning and self organization.

4. Differentiate between volatile and non-volatile memories.

There are two types of computer memories that is primary memory (volatile memory) and secondary memory (non – volatile memory)

There is a random only memory (RAM) this is called volatile memory it will store only a temporary memory , it store many data in MBs , this memory is used to normal operation of computer, this memory help to writing a data faster.

There is a read only memory (ROM) is called non volatile memory it help to store a permanent data storage , it store a data in GBs ,This is used for startup process of computer, this memory help to write a data slower.

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

System software:

It is a type of software to designed a computer hardware and application programs. Software like system operating editors and drivers computer cannot function without this software. System software interface between hardware and a uses 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 processor, accounting application, a web browser, an email client, media player etc

Open source software:

This 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 (OS) is the best-known examples of open source software technology

6.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.

I am silpha, coming from dharmapuri it is located in tamilnadu state, and my father name is subramani he is a former and my mother name is baby she is a house keeper, I have one elder sister and one younger brother, I was finished my under graduate in J S V College Of Arts And Science Aatukarpatti village and dharmapuri district I finished my post graduate also the same college, I got a my graduate certificates in my current period of college, thanks

M S Word is widely used to word processer developed by Microsoft

This Microsoft word office is capable to typing creating a word office and editing and saving the documents it helps us to take a print what we need to explain as a document paper these are the uses of Microsoft office word uses. At the same time we can change word style size and font size and style etc....

7. write steps regarding following

To change the font style

To change the font size

To change the font colour

To highlight (in yellow) the line that reads “need to get IMS’ S address”

TO CHANGE THE FONT STYLE:

First you select the text you want to change in your document ,

Click on the font style box in the font group on the home tab, then different font styles will appears on front of the mirror ,

Then you just move your cursor over the font styles , then left click on the style what you want to modify ,

Finally font style will be change in your document.

TO CHANGE THE FONR SIZE:

First step select the text what do you want to modify,

Then click on the font size box in the font group on the home tab, then font size menu will appears in front of the mirror

You will move your cursor over the various font sizes on the mirror, left click on the font size what you want to use in your document

Then font size will be change in your document

TO CHANGE THE FONT COLOUR:

Select the text you want to modify,

Click on the font color box on the home tab in the font group

After words font colors will be appears in front of the mirror

Then move your cursor on that color

Lift click on the color what you what to have then finally font color will be change in your document.

TO HIGHLIGHT IN YELLOW :

“Need to get IMS’s Address

”

8. Create a file in MS-Word for the following statement and save it with the file name “equations” describe all steps involve in it.

Equations:

$$X_2 + Y_5 = 30$$

$$Z^3+Q^4=50$$

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

To change a text as subscript

First you select the text want to modify, click on the subscript command on the home tab, then it will change as a subscript in the document or text a small letter just above the line of text again you just click on the subscript command on the home tab, finally it will change as a subscript.

9. Create a file in MS-Word that convert existing highlight text to table as shown below and save as file name text – to –table. Describe all steps involve in it.

If you want to change a text as a table you have to follow the following rules, First you select the text want to modify or convert as a table then select the insert tab, after words click on the table command then the dialog box will appears in front of the mirror, then click on the convert text to table after your left click a new dialog box will appears there then you have set the number of columns how many numbers you want after finishing that step click ok finally that selected text will convert as a table.

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

To insert a new table in your work sheet follow these steps First place your insertion point in your document where you insert the table, then select the insert tab click on the table command, then drag your mouse over the diagram to select the number of columns and rows as you need, finally left click your mouse table will appears in your document then you can text inside of the table as you want.

11. create a following worksheet in MS-Excel and save it with name 'Book1'.

Roll No	Name	Marks	
1	n1	60	
2	n2	70	
3	n3	80	
4	n4	90	
5	n5	40	
6	n6	50	
7	n7	77	
8	n8	44	
9	n9	88	

12. Calculate the following things of a range (C2:C11) of date in the worksheet created in question number 10.

To sum of the marks using auto sum in the range of cells (C2:C11):

First select the cell where you want to appear function then select the drop down arrow next to the AUTOSUM on the home tab, then select the sum, formula will appear where you fixed your arrow then you just enter the columns you calculate, then automatically cells range will come to that column press ok the result appears.

Average the marks in the range of cells (C1:C11):

Similarly you can calculate the average of that cell, so click on the auto sum symbol Select average the formulas appear in the selected cells then enter average will appears.

Highest marks in the range of cells (C2:C11):& minimum marks i the range of cells

Similarly you can calculate the minimum and maximum number of the cells, click on the auto sum in the home tab then click on the minimum or maximum what you want formula will appears in the cells finally enter total will appear theta it.

13 a) Describe various steps involved in the following

To modify column width of a worksheet:

First position the cursor over the column line in the column heading then there is a double arrow will appear, left click to the mouse then drag your cursor to increase the width of the column or drag your cursor to the right side to decrease your column width. Then release your mouse. Another step also there to change that.

To modify the row height of a worksheet:

First position the cursor over the row line where you want to modify then double arrow will appears, left click the arrow drag your mouse to upward to increase your row height and drag your mouse to down word to decrease your row height then remove the mouse button.

To delete rows and columns of a worksheet:

First select the row or column where you want to delete then click on the delete command in the cells group on the home tab. Then selected row or column will deleted.

b) Describe following terms in the worksheet

Absolute reference and relative reference in formula

Cell reference in formula automatically adjusts to new location when the formula is posted into different cells. This is called relative reference.

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

An absolute reference solves this problem

Absolute reference cell reference in a formula always refers to the same cell range. If a formula is copied to a different location the absolute reference remains the same.

Cell address

The cell address function is categorized function under excel lookup reference function list of the most important excel function in financial analysis it provide a cell reference.

14. What tools are available to customize our PowerPoint presentation?

There are many tools available in Microsoft power point to customize. Power point is a most excellent way of presenting to an audience in visual form. It is very different one and different way of presenting your ideas. It helps the speaker and a participant to understand the topic easily.

b) Write the steps for the following action for creation of power point presentation

Open a Blank presentation

First click on the start button,

Then select the power point in Microsoft office

Then double click then power point page will open.

Save the presentation as Lab1.pptx

First you located or select the save command o the access toolbar.

If you are saving the file for first time save as command will appears on the backstage view.

Then you just choose the folder where you want to save the file and gave that file name after words file will be saved on that folder.

Save that file name as lab1.pptx.

Add a Title to the first slide: the name of your college

Open the power point slide show page there is a visual will appears that is "click to add title" in that place move your cursor over the caption and left click then you can add your college name as a title .

Type your first name and last name in the Subtitle section

Same as your title creating there is another caption was appears that is click to add subtitle there you can give your name as a subtitle.

Add a New Slide which has a Title and Content

Here after you want to make a content go to next slide click on the new slide then new slide will appear there about your college life and your college you can prepare that as a slide show to present in front of your students.

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

In your slide show power point presentation there are many will going to presented by you in that time if you want to highlight some points you can add a bullets Click on the home tab there is many bullets are appears click on that to add a bullets.

Inserting Excel Sheet

Click on the insert tab on the home tab then click on the object command on the text group, than dialogue box will appear finally choose excel left click on that , excel sheet will appear on the mirror.

Clip art and Text

When you preparing a slide show you want some example pictures to explain that if you don't have those pictures in your system you can select that from a clip art which is a best option to get some pictures.

Click on the clip art command there is a text bar will appears in your right side mirror there you search those arts. Click on that art that will add to your slide show.

Slide show effects

To start the presentation at the first slide in the start slide show group click from beginning, this slide show is helps you to explain very clearly about your topics, audience also can understand easily about your presentation.

PART 2

1) What is the difference between the machine language and high level language?

A machine language is a programming language consists of binary instructions which computer can respond to directly. Sometimes it is refer to a machine code or objective code. Machine language is a collection of binary digits it is very difficult to understand the machine language code as like 0 and 1. This language makes a fast and efficient of the computer. It requires no translator to translate; this machine language is directly understood by the computer. There is a disadvantage about machine language. All memory address have to be remembered, all operation code to be remembered.

A high-level language is any programming language that enables development of a program in a much more user-friendly programming context. This language is a programming language with strong abstraction about the details of the computer. Consists of low level language (assembly language) ex: c, c++, java

High level languages are grouped in two categories based on execution model compiled or interpreted languages High level languages are programmer friendly. They are easy to write and maintain. It is a machine independent language at the same time it is very easy to learn. Compared to low level programs, they are generally less memory efficient. Cannot communicate directly with hardware

2) Discuss about different data type of C programming language.

Date type is very simple and important concept available in all the programming language which is called data types. As its name indicates, a data type represents a type of the data which you can process using your computer program. It can be numeric, alphanumeric, decimal, etc. Here is a simple way to adding a two whole number 100&10 which can be done simple as follow: 100+10, let us take a another problem where we want to add two fractional numbers 100.5 and 10.5 these two examples are straight forward. Here we can discuss about another example write a record about student in note book information like Name, Class, Section & Age.

Name : ram kumar

Class: 12th

Section: C

Age:22 .

This is only a data type of c programming each variable in c has an associate data type each data type required different amount of memory and has some specific which can be performed over it. Here is a some examples for common data type that is Char, int., float,

3) find the output of the following expressions

a) $X = 20/5 * 2 + 30 - 5$ b) $Y = 30 - (40/10 + 6) + 10$ c) $Z = 40 * 2 / 10 - 2 + 10$

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

$X = 4 * 2 + 30 - 5$

$X = 8 + 30 - 5$

$X = 38 - 5$

$X = 33$

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

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

$Y = 30 - (2.5) + 10$

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

$Z = 80 / 10 - 2 + 10$

$Z = 80 / 8 + 10$

$Z = 10 + 10$

$Z = 20$

4. Describe the syntax for the following statements.

A) If else statement :

If statement can be followed by an optional else statement, which execute when the Boolean expression is false, the syntax of an false statement in C programme language .you can understand derstand a\the concept of conditional statement c programme with the following example. Find the largest number of the if the numbers are a=30and b=50.

B) For looping :

For loop is similar to while, it is just written differently for statements are often used to process list such a range of numbers. For example is single statement and block statement

expression1 - Initializes variables

expression2 - Conditional expression, as long as this condition is true loop will keep executing.

expression3 - expression3 is the modifier which may be simple increment of a variable.

C) While loop:

The most basic loop in C is the while loop. A while statement is like a repeating if s tatement. Like an If statement, if the test condition is true: the statements get executed. The difference is that after the statements have been executed, the test condition is checked again. If it is still true the statements get executed again. This cycle repeats until the test condition evaluates to false.

D) do- whole loop:

Do while 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 content of the loop are always executed at least once.

5. Find the output of the following program segments

a)

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

Answer : IMS Ghaziabad

b)

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

Answer: IMS Ghaziabad
IMS Ghaziabad

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);
}
```

Answer: largest number is 100