

Q1. Fill in the blanks:

[10]

- a) _____ is a software stored on a small memory chip on the motherboard which instructs the computer.
- b) _____ operating system runs on computers which are located in different geographical areas, interconnected through a network.
- c) Virtual Reality is an example of _____ operating system.
- d) A range is group of _____ cells.
- e) The cell address in a formula is also called _____.
- f) A _____ is a graphical representation of data in a worksheet.
- g) The set of instructions written in a stepwise sequence is called _____.
- h) Logical operators are _____, _____, _____.
- i) The _____ operator works on a single variable or constant.
- j) _____ is a box that identifies the patterns or colours assigned to a data series in a chart.

Q2. State True or False. If false correct the underlined word and rewrite the word only.

[5]

- a) The general direction of flow in any flowchart is from bottom to top or from right to left.
- b) Scatter chart is the default chart type in Excel.
- c) The error #VALUE occurs if the formula contains invalid data.
- d) CUI does not need much RAM to run.
- e) Relational operators are used to evaluate true condition.

Q3. Write the results of the following expressions:

[5]

- a) If $x=24$ and $y=8$
 $x==y$
- b) If $a=56$ and $b=32$
 $a!=b$

- c) $(28 \geq 28) \parallel (40 < 8)$
- d) $(5 > 8) \&\& (35 < 25)$
- e) If $m=78$ and $n=60$
 $m \geq n$

Q4. Match the column.

[5]

Column A	Column B
a) Anti Virus	i) Absolute reference
b) Robots	ii) Mixed reference system
c) $\$A1+A\2	iii) Real time operating
d) $\$A\$1+\$A\2	iv) System software
e) Device drivers	v) Utility Software

Q5. Evaluate the expressions(show the working also)

[10]

- a) $X=10, Y=12, Z=16$
 $++X + --Y + Z-- + Z$
Find the result and final values of X, Y, Z
- b) $X1=X++ -X++ + ++X \quad X=10$
Find the value of X1 and final value of X
- c) $C=a++ + ++a + b++ + --b \quad a=20, b=15$
Find the result of C and final values of a, b,
- d) $m=n++ + --n-n*10 \quad n=15$
Find the result of m and final value of n

Q6. Differentiate between the following:

[10]

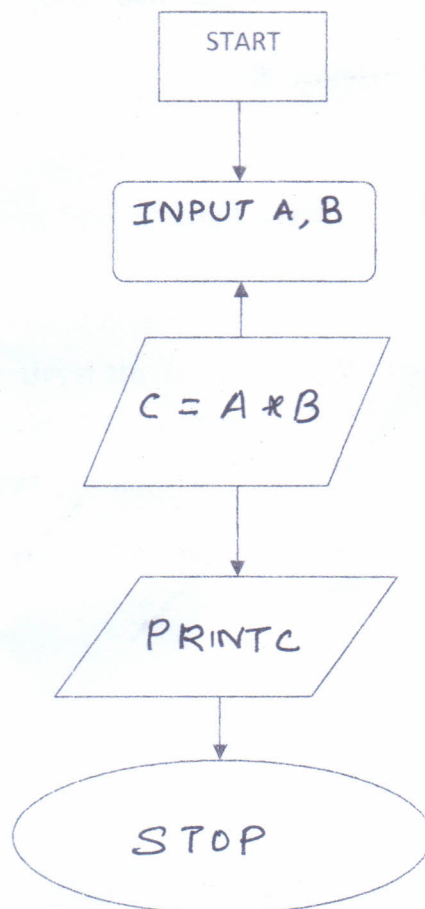
- a) Logical error and Syntax error
- b) Formulas and Functions
- c) Category Axis and Value Axis
- d) On Page and Off Page Connectors
- e) Interpreter and Compiler

Q7. Answer the following :

- a) Why GUI based operating systems are more expensive than CUI based operating system? [1]
- b) Explain the process of moving the chart. [3]
- c) Write the size in bytes of data type Integer, Fractional, Character and Boolean. [2]
- d) With an example explain the function of / and % operator. [2]
- e) Explain Unary ++ and -- operator. [3]
- f) Write the names of any two single user operating system and two multi-user operating system. [2]
- g) What is an User Interface? Explain the different types of user interface with an example each. [3]
- h) Write the use of input/output, process and decision box? [3]

Q8. Correct the flowchart symbols to multiply two numbers. [3]

a)



b) Arrange the given algorithm to compare two numbers and find the greater one in correct order. [3]

- i. Print "both numbers are equal" and stop.
- ii. Print "A is greater" and stop.
- iii. Print "B is greater" and stop.
- iv. Check whether $A=B$. If true then goto step iii, else goto step iv
- v. Input two numbers and store them in A and B.
- vi. Compare A and B. If A is greater than B, goto step v else goto step vi.

Q9.a. Draw flowchart to accept any alphabet. Display the message VOWEL if the accepted alphabet is a vowel, otherwise display the message not a vowel.[4]

b. Draw flowchart to calculate the area of a rectangle. [3]

c. Write algorithm to add two numbers and display the result along with square of the sum. [3]
