

- Q.1 A** Select the correct alternatives and rewrite the sentences 4
- a ----- is not an operating system.
i. UNIX ii. LINUX iii. MS-DOS iv. C++
- b Maximum number of nodes of symmetric binary tree with depth of 7 is -----
i. 125 ii. 127 iii. 128 iv. 124
- c In C++ double type data consumes -----bytes in memory.
i. 2 ii. 4 iii. 6 iv. 8
- d ----- tag is used to put a line break in HTML code.
i. <HR> ii.
 iii. <P> iv.
- B** Answer any two of the following 6
- a Explain with flow chart the following control structure:
i)Sequence logic ii)Selection logic iii)Iteration logic
- b List any six features of LINUX Operating system.
- c Explain general structure of HTML page.
- Q.2 A** Answer any two of the following 6
- a Explain friend function in C++ with example
- b Explain memory map of suitable user operating system
- c Explain binary search algorithm with a suitable example
- B** Answer any one of the following 4
- a Explain operator overloading with suitable example. Write any two characteristic of the operator overloading.
- b What is Binary tree? Draw the tree diagram for the expression.
 $B = (3R/5T)^2 - (R-Q)^3$
- Q.3 A** Answer any two of the following 6
- a Explain local data and global data variable in C++ using example.
- b State features of WINDOWS NT
- c Explain different types of inheritance with suitable diagram
- B** Answer any one of the following 4
- a Define the following terms with reference to tree:
i)Root ii)Leaf iii)Sibling iv)Depth
- b What is Partitioning? Explain fixed and variable partitioning.
- Q.4 A** Answer any two of the following 6
- a Discuss Virus Detection, Removal and Prevention Philosophies.
- b With syntax diagram explain the structure of HTML webpage.
- c What are pointers in C++? Explain the use of pointer variable for function definition using call by value and call by reference

B Answer any one of the following

- a Explain the use of video RAM. Explain data Bytes and Attribute Bytes
- b Explain Bubble Sort Algorithm with suitable example.

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Q.5 A Answer any two of the following

- a Write a program in C++ to print first 20 terms of a Fibonacci series.
- b Implement a Circle class. Each object of this class will represent a Circle accepting its radius value as float. Include an area() function which will calculate the area of circle.
- c Write an HTML code for the following:

Year	Students		
	Boys	Girls	Total
2004	25	30	55
2005	80	25	105

OR

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B Answer any two of the following

- a Implement a class average. Include a constructor in it which will accept value of three variables from user. Include two more functions in it, one function calculates average and other prints it.

- b Write an HTML code for following :
 COLLEGE h1 and center
 Principal
 Vice Principal
 Professors
 Non-Teaching Staff
 For more details [click here](#)

(The word click here act as or hyperlink to next page whose address is "C:\My Document\A1.HTML")

- c Write a C++ program to find the smallest in an array of 10 numbers using pointers.

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