COMPUTER SCIENCE – 1 MARCH 2016

Q.1 A) Select correct alternative and rewrite the following:
1. BORDER is attribute used in------- tag of HTML.   01
    - i.   <PRE>
    - ii. <ADDRESS>
    - iii. <TABLE>
    - iv. <CAPTION>

2. In C++, double type data consumes --------- bytes in memory.   01
    - i.   2
    - ii. 4
    - iii. 6
    - iv. 8

3. --------- is an operating system.   01
    - i.   VBSCRIPT
    - ii. UNIX
    - iii. C
    - iv. BASIC

4. Context switching is a term related to ---------- management.   01
    - i.   Process
    - ii. Memory
    - iii. Information
    - iv. Device

B) Answer any two of the following:
1. Explain three stages of I/O operations related to disk.   03
2. State any 6 characteristics of Constructor.   03
3. Define   03
    - i. File   ii. Record   iii. Data

Q.2 A) Answer any two of the following:
1. Explain Virus detection, Removal and Prevention.   03
2. What is Polymorphism? Explain Compile time and Run time polymorphism.   03
3. State algorithm for inserting an element in an array.   03

B) Answer any one of the following:
1. What is operator function? Explain difference between operator function as member function and as a friend function.   04
2. Explain local data and global data in C++ using example.   04

Q.3 A) Answer any two of the following:
1. State characteristics of friend function.   03
2. Explain the following tags   03
    - i. <IMG>   ii.
     iii. <HR>
3. State the features of WINDOWS-NT.   03

B) Answer any one of the following:
1. Using examples, explain how files are opened and closed in C++. State any four file modes.   04
2. Explain the process of multiprogramming in process management with the help of an example.   04

Q.4 A) Answer any two of the following:
1. State three characteristics of static data.   03
2. Explain the use of memory management operators in C++.   03
3. What is record? How it is represented in memory?   03

B) Answer any one of the following:

1. What is virtual memory? Explain any three terms related to virtual memory. 04
2. Explain the following terms with respect to memory management. 04
   - i. Internal priority
   - ii. External priority
   - iii. Purchase priority
   - iv. Time slice

Q.5 Answer any two of the following:

1. Write a program in C++ to print first 20 terms of Fibonacci series. 05
2. Implement a class temperature. Include a constructor in it which accepts value of 05
   temperature from user in degree Celsius. Include two functions in it, one of which
   calculates its equivalent temperature in degree Fahrenheit and other function prints
   the answer. (formula : c/5 = (f-32)/9)
3. Write an HTML code for the following: 05

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

Record

OR

1. Implement a class average. Include a constructor in it which will accept value of three 05
   variables from user. Include two more functions in it, one function calculates average
   and other prints it.
2. Implement the class hierarchy of inheritance. Class student accepts roll number of 05
   student, class marks accept marks of three subjects and class result calculate the total
   and prints all details. (Create object of class result)
3. Write an HTML code of following output: 05

COLLEGE

Principal
- Vive principal
- Professors
- Non-teaching staff

For more details click here