

B. N. Bandodkar College of Science, Thane.
Junior College

S.Y.J.C. 1st Term Examination, October 2014

Subject – Computer Science; Paper I (Computer Software)

Time: 3 Hours

Max. Marks: 50

Note: 1) All questions are compulsory.

- Q. 1 A** Select the correct alternative and rewrite the following. 4
- 1) Operating system is a _____
 a) Hardware b) Software c) Input Device d) Output device
 - 2) Accessing each element of an array only once is called _____
 a) Traversing b) Searching c) Locating d) Selecting
 - 3) The ability to take more than one form is called _____ in object oriented programming.
 a) Inheritance b) encapsulation c) polymorphism d) data abstraction
 - 4) In _____ type of list, list items are marked with bullets
 a) Ordered b) Definition c) Nested d) Unordered
- B** Answer any two of the following 6
- 1) Explain in brief any six data structure operations.
 - 2) Explain the use of following tags with example : a) <MARQUEE> b) <SUP> c)
 - 3) What is a class? Explain general form of class declaration with example.
- Q. 2 A** Answer any two of the following 6
- 1) What do you understand by the term 'Searching'? Which are the different types of searching algorithms? Explain the linear searching algorithm.
 - 2) What is a constructor? Explain types of constructors with example.
 - 3) What is VDU? Explain the terms: a) Dumb Terminal b) Intelligent terminal.
- B** Answer any one of the following 4
- 1) Explain the concept of function overloading with example.
 - 2) Explain the algorithm for inserting an element into an array.
- Q. 3 A** Answer any two of the following 6
- 1) Explain contiguous allocation method used in operating system.
 - 2) What are the types of lists? Explain with the example.
 - 3) Explain virtual function. Why is it necessary?
- B** Answer any one of the following 4
- 1) Explain context switching at a process level in multiprogramming system with example.
 - 2) What is inheritance in C++? Explain different forms of inheritance with example.
- Q. 4 A** Answer any two of the following 6
- 1) Explain use of following tags with one example each: a) <BODY> b) <TR> c) <P>
 - 2) Explain the terms: a) Seek time b) Rotational delay c) Transmission time.
 - 3) What is operator overloading? Write syntax and example of operator function.
- B** Answer any one of the following 4
- 1) Explain use of pointer variables using call by reference method with example.
 - 2) Explain the bubble sort algorithm with suitable example.
- Q. 5** Answer any two of the following 10
- 1) Write a C++ program to find factorial of a number accepted by user.
 - 2) Write a C++ program to interchange two numbers by using call by reference method.
 - 3) Write the HTML code for the following table:

		Year		
		1999	2000	2001
Sales	Units	300	750	1200
	Income	Rs.3000	Rs.7500	Rs.12000

OR

- Q. 5** Answer any two of the following 10
- 1) Write a program in C++ with a complex constructor to add the given two complex numbers. The program should print the given complex number and their sum.
 - 2) Write a C++ program that will read a line of text and count the number of words in a text.
 - 3) Write the HTML code for the following table:

College Name: B.N.Bandodkar College.	
Admission Data	
<i>Streams</i>	<i>Capacity</i>
Commerce	150
Science	100
Arts	100

Here Admission Data should be the scrolling text and College name should be in bold, italics and in red color.

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