

Tilak Maharashtra Vidyapeeth, Pune
Bachelor of Computer Applications (BCA)
Internal Assignment (2009-2010)

Subject: Object Oriented Programming Using C++ (PRACTICAL)

Assignment No. 1

20 Marks

1. Write a program to print Pascal triangle
2. Calculate area of circle, square, rectangle, triangle using function Overloading.
3. Create Shape class, derive Triangle, Circle, Rectangle from base class Shape. Add get data (), disp_area () functions as member function of Shape. Make disp_area as virtual function in base class.
4. Perform addition, multiplication, subtraction of 2-D array using Operator Overloading.
5. Write a program to merge two arrays after eliminating duplicate elements.

Assignment No. 2

20 Marks

1. Write a program for row wise sort for a square matrix.
2. Write a program to find the area and perimeter of square and triangle by creating the class 'shape', 'square', 'triangle' and required data members and functions like input vales (), area (), perimeter ().
3. Design a Class 'Complex' with data members for real and imaginary Part. Provide default and parameterized constructors and member Functions to get (), set, display (), add (), subtract (), multiply () and divide () two complex numbers.
4. Overload + operator for string concatenation.
5. Write a C++ program to compare strings (length wise) using '>', '<', '=' operator.

Assignment No. 3

20 Marks

1. Write a C++ program to perform operation on file data. Insert line, display contents, counts lines and words in a file.
2. Write a C++ program to show a main function can be friend function of a class
3. Write a C++ program to transfer the content of one text file to another using command line arguments.
4. Write a program that counts the no of digits in a given number. If an alphabet is entered instead of a number, the program should not terminate. It should display appropriate error message.(Exception Handling.)
5. Write a C++ program to accept and convert time from 24 hour to 12-hour clock. (Write class12 and class24)