

**SUBJECT CODE NO:- P-374**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**S.E. (CSE/IT) Examination May/June 2017**  
**Object Oriented Programming Using C++**  
**(Revised)**

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B i) Q.No.1 and Q.No.6 are compulsory.  
ii) Solve any two from each section

Section A

- Q.1 Solve the five 2\*5=10
- a. What is the use of scope resolution operator (::) in C++?
  - b. What are the operators of C++ that cannot be overloaded?
  - c. How does constructor differ from normal functions?
  - d. What is the default access mode for class members?
  - e. What do you mean by cascading of I/O operators?
  - f. What is the structure of C++ program?
  - g. What will be the output of the following code?  
For(int m=0; m<5; m++)  
Cout << m;
  - h. what does the following poop prints out?  
int m=1;  
While(m<11)  
{  
m++;  
cout<<m++;  
}
- Q.2 a. Define a class STRING. Overload + operator to concatenate two strings. 08  
b. Write a C++ program to create a class circle having data members radius, member functions to 07  
i) read radius, ii) to calculate & display area iii) to calculate & display circumference. Create two objects of class.
- Q.3 Explain object-oriented paradigm with all its essential elements 15
- Q.4 a. What is friend function? Explain with example. 08  
b. Explain function overloading with programming example. 07
- Q.5 Explain the type conversions in C++, with example. 15
- Section B
- Q.6 Solve any five 2\*5=10
- a. What is an I/O stream
  - b. what is the type of class for which objects cannot be created?
  - c. How to open and close file?
  - d. What is generic classes in templates?
  - e. What is "this"
  - f. What is container?
  - g. What is the difference between private and protected class members?
  - h. What do you mean by function? What is the prototype of function?

- Q.7 a. What do you mean inheritance & containership in C++? Explain 08  
 b. What is stream manipulators? Discuss setw( ), setfill( ), setprecision( ) 07
- Q.8 a. What is file mode? Discuss the various file mode options available in C++ 08  
 b. What is polymorphism? What are the advantage of using it? Differentiate between compile time & runtime polymorphism with example. 07
- Q.9 a. Explain throwing & Catching mechanism. 08  
 b. What do you mean by abstract class? Explain with example. 07
- Q.10 Write a program to create a class STUDENT having data member roll no. Create classes TEST & SPORTS from class student having data member marks of two test & sports score respectively. All three classes contain functions. i) to set values of data members ii) to display values of data members. 15  
 Create class RESULT from Class test & sport having data member total & member function to calculate total, display all information of student. Create one object of class result & call proper functions.