## SUBJECT CODE NO:- E-172 FACULTY OF ENGINEERING AND TECHNOLOGY

## S.E.(CSE/IT) Examination Nov/Dec 2017 Object Oriented Programming Using C++ (OLD)

[Time: 7	Time: Three Hours]		lax.Marks:80
N.B	Please check whether you have got the right question paper.  i) Q. No.1 from section A and Q. No.6 from section B are compulsory.  ii) Solve any two questions from each section from remaining.  iii) Assume suitable data, if necessary.  Section A		
Q.1	Solve any five:	10	
	a)	What are the features of OOPS?	
	b)	What is difference between function overloading and function overriding in c+	+.
	c)	What is the friend function?	
	d)	Define super keyword.	
	e)	Define scope resolution operator.	
	f)	What are the Access Specifiers in C++	
	g)	What are the benefits of inheritance?	
Q.2	- A	in the following concepts of OOP in detail with an example.	15
		Objects & Class	
	0,0	Inheritance Polymorphism	
Q.3	a)	Write a program in C++ based on following requirement An EMPLOYEE class contains the following members: Date Members: Employee_Number, Employee_Name, Basic, DA,IT, Net_Sal; Member Function: to read data, to calculate Net_Sal and to print data memebrs Write a C++ program to read data on N employees and compute the Net_Sal of	<b>;</b> ;
	b)	employee (DA=52% of Basic and Income Tax=30% of the gross salary). What do you mean by inline function? Explain with example	07
Q.4		What is inheritance? Explain multiple inheritance with example. Write a program to swap two numbers using call by value & call by reference.	08 07
Q.5		Explain Constructor and its type with example. Explain virtual base class with suitable example.	08 07

## SECTION B

Q.6	Solve any five:	10
	a) What are three components of STL.	
	b) Define early and late binding?	
	c) Define fstream with example	, 0 L C
	d) What is "this"?	30,00
	e) Define template	2500
	f) What is abstract class?	32,50
	g) What is divided by zero exception?	30 v
	h) Define containers?	· · · · · · · · · · · · · · · · · · ·
Q.7	a) Write short note on new and delete operators.	08
	b) Explain virtual base class with suitable example.	07
Q.8	a) Write a program to illustrate the concept of exception handling	08
	b) Explain the concept of command line arguments with example	07
Q.9	a) Write a c++ program to read a file name and display the content of file on screen	08
	b) Explain the concept of vectors in STL with example.	07
Q.10	a) Explain the concept of visibility mode in inheritance with example.	08
	b) Write a short note on "I/O manipulation"	07