

Exam.Code:0906
Sub. Code: 33266

2015

B.E., Second Semester

ITC-201: Object Oriented Programming Using C++

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

1.	a.	How do inline functions enhance the performance of a program?	2
	b.	Why cannot static variables be initialized using constructors?	2
	c.	Highlight the significance of using function templates in C++.	2
	d.	State two main uses of <i>this</i> pointer.	2
	e.	Differentiate between aggregation and composition.	2
		UNIT I	
2.	a	Specify the purpose of various types of constructors in C++ with examples.	5
	b	Explain unformatted and formatted console I/O operations with examples.	5
3.	a	Write a program to illustrate the concept of friend functions. What are the merits and demerits of using friend functions?	5
	b	How is memory allocated to classes and objects?	5
4.	a	What is polymorphism? Differentiate between function overloading and overriding with example?	5
	b	Write a program to illustrate the conversion of primitive data type to user-defined type.	5
		UNIT II	
5.		Explain the various types of inheritances used in C++. Give an example of each.	10
6.	a	List the major differences between passing the parameters to a function by pointer and passing by reference.	4
	b	What are the various modes in which a file can be opened? Write a program in C++ showing opening of a file with constructor function and opening of another file with open() function.	6
7.	a	What is an exception? Illustrate the process of handling exceptions in C++ with an example.	6
	b	List two major benefits of using object oriented analysis and design.	2
	c	State the purpose of iterators and allocators in C++.	2

x-x-x