Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER–III • EXAMINATION – WINTER 2013

Subject Code: 330702 **Date: 02-12-2013**

Subject Name: Programming In C++

Time: 02:30 pm - 05:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **English version is considered to be Authentic.**

Q.1	(a)	Define following terms: (1) Class (2) Object (3) Data Abstraction (4) Inheritance (5) Polymorphism (6) Encapsulation (7) Dynamic Binding	**07**
	(b)	Write the benefits and applications of Object Oriented Programming.	**07**
Q.2	(a)	Explain different Manipulators of C++ with example.	**07**
	(b)	Write a program to add two different values of different data types by using function overloading concept.	**07**
		OR	
	(b)	Explain inline function and default argument concepts with example.	**07**
Q.3	(a)	What is Constructor? Explain different types of constructors.	**07**
	(b)	What is Operator Overloading? Explain overloading of unary operators with example.	**07**
		OR	
Q.3	(a)	Explain friend function with example.	**07**
	(b)	Create a class FLOAT that contains one float data member. Overload all the four arithmetic operators so that they operate on the objects of FLOAT.	**07**
Q.4	(a)	List different types of Inheritance. Explain any two inheritance with example.	**07**
	(b)	What is visibility mode? Explain different inheritance visibility modes supported by C++.	**07**
		OR	
Q. 4	(a)	Explain call by value and call by reference concepts with example.	**06**
	(b)	Explain following terms with example. (1) this pointer (2) Pointers to function	**08**
Q.5	(a)	Explain Polymorphism with example.	**07**
	(b)	Explain C++ stream classes with diagram.	**07**
		OR	
Q.5	(a)	What is Command Line Argument? Explain with example.	**07**
	(b)	Write short note on Exception Handling.	**07**

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ગુજરાતી

પ્રશ્ન. ૧	અ	નીચેના શબ્દોની વ્યાખ્યા આપો:	૦૭
		(1) Class (2) Object (3) Data Abstraction (4) Inheritance (5) Polymorphism (6) Encapsulation (7) Dynamic Binding	
	બ	Object Oriented Programming ની ઉપયોગિતાઓ અને એપ્લીકેશન લખો.	૦૭
પ્રશ્ન. ૨	અ	C++ ના વિવિધ Manipulators ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Write a program to add two different values of different data types by using function overloading concept.	૦૭
		અથવા	
	બ	Inline function અને default argument concept ઉદાહરણ સહિત સમજાવો.	૦૭
પ્રશ્ન. ૩	અ	Constructor એટલે શું? વિવિધ પ્રકારના Constructor ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Operator Overloading એટલે શું? Unary operatorsનું ઓવરલોડીંગ ઉદાહરણ સહિત સમજાવો.	૦૭
		અથવા	
પ્રશ્ન. ૩	અ	Friend function ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Create a class FLOAT that contains one float data member. Overload all the four arithmetic operators so that they operate on the objects of FLOAT.	૦૭
પ્રશ્ન. ૪	અ	વિવિધ પ્રકારના Inheritance ની યાદી બનાવો. કોઇપણ બે inheritance ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Visibility mode એટલે શું? C++માં વપરાતા વિવિધ પ્રકારના inheritance visibility modes સમજાવો.	૦૭
		અથવા	
પ્રશ્ન. ૪	અ	Call by value અને call by reference concepts ઉદાહરણ સહિત સમજાવો.	૦૬
	બ	નીચેના શબ્દો ઉદાહરણ સહિત સમજાવો.	૦૮
		(1) this pointer (2) Pointers to function	
પ્રશ્ન. ૫	અ	Polymorphism ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	C++ stream classes ડાયેગ્રામ સહિત સમજાવો.	૦૭
		અથવા	
પ્રશ્ન. ૫	અ	Command Line Argument એટલે શું? ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Exception Handling વિષે ટૂંકનોંધ લખો.	૦૭

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