Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– III EXAMINATION – WINTER 2018

Subject Code: 3630004   **Date: 09-01-2019**

Subject Name: Programming with C++

Time: 10.30 am to 1.00 pm   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Differentiate class and structure.	**07**
	(b)	What is a local class? Explain local class with suitable example.	**07**
Q.2	**(a)**	i. Explain inline function with suitable example.	**05**
		ii. Write a general syntax of nested namespace.	**02**
	(b)	What is a static function? Explain static function with suitable example.	**07**
		OR	
	(b)	What is a function pointer? Explain function pointer with suitable example.	**07**
Q.3	**(a)**	What is an explicit constructor? Explain explicit constructor with suitable example.	**07**
	(b)	Write a sort note on Koenig lookup.	**07**
		OR	
Q.3	**(a)**	What is a template function? Explain template function with suitable example.	**07**
	(b)	Explain binary operator overloading as friend function with suitable example.	**07**
Q.4	**(a)**	What are multiple inheritances? Explain drawback of multiple inheritances.	**07**
	(b)	What is do you mean by extending the namespace? Explain it with suitable example.	**07**
		OR	
Q.4	**(a)**	Explain container class with suitable example.	**07**
	(b)	What is a static function? Explain static function with suitable example.	**07**
Q.5	**(a)**	Explain multiset sorted associative container with suitable example.	**07**

	(b)	Write a C++ program in which design classes such that they support the following statements:
		Feet f1(10),f2;
		Inch i1;
		i1 = f1; // convert feet to inches
		f2 = i1; // convert inches to feet
			07

		OR	
Q.5	**(a)**	Write a sort note on STL.	**07**
	(b)	Explain non type argument with suitable example.	**07**

****