## HAMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

## T. Y. B. C. A. BCA -306 (Practical Based on BCA-301)

Teaching Scheme (per week)		Examination Scheme					
Th. (hours)	Pr. (hours)	Internal		External		Total	
		Th.	Pr.	Th.	Pr.	Th.	Pr.
		(marks)	(marks)	(marks)	(marks)	(marks)	(marks)
-	3	-	30	-	70	-	100

## **Program List:**

- [1] Write a cpp program, which explain the use of a scope resolution operator.
- [2] Write a cpp program, which explain the use of a manipulators operator.
- [3] Write a cpp program, which explain the use of reference variable.
- [4] Write a cpp program, which explain the feature of a inline function.
- [5] Write a cpp program, which explain the concept of default arguments.
- [6] Write a cpp program for function overloading.
- [7] Write a cpp program for arrays within a class. (How to use a array in a class).
- [8] Write a cpp program for static class member. (Class member should be a static variable)
- [9] Write a cpp program, which show use of "static member function".
- [10] Write a cpp program, which explain concept of a " array of object".
- [11] Write a cpp program, which explain concept of "object as a arguments".
- [12] Write a cpp program for a friend function.
- [13] Write a cpp program for a function friendly to two classes.
- [14] Write a cpp program of a swapping private data of classes.
- [15] Write a cpp program, which explain concept of returning objects.
- [16] Write a cpp program for class with constructors.
- [17] Write a cpp program for overloaded constructors.
- [18] Write a cpp program of copy constructors.
- [19] Write a cpp program of a constructing matrix objects.
- [20] Write a cpp program of implementation of destructors.
- [21] Write a cpp program for implementation of unary minus operator.
- [22] Write a cpp program for implementation of binary plus(+) operator.
- [23] Write a cpp program for implementation of overloading operators using friends function.
- [24] Write a cpp program for implementation of mathematical operations on strings.. {Overloads two operators + and <=}
- [25] Write a cpp program for implementation of a single inheritance of public data member.
- [26] Write a cpp program for implementation of a single inheritance of private data member.
- [27] Write a cpp program of multilevel inheritance.
- [28] Write a cpp program of multiple inheritances.
- [29] Write a cpp program of hybrid inheritance.
- [30] Write a cpp program of virtual base class.
- [31] Write a cpp program in which use constructors in derived class.
- [32] Write a cpp program of initialization list in constructors.
- [33] Write a cpp program for implementation of pointers to objects.
- [34] Write a cpp program for implementation of array of pointer to objects.
- [35] Write a cpp program for implementation of a this pointer.
- [36] Write a cpp program for implementation of virtual function.
- [37] Write a cpp program, which explain a concept of runtime polymorphism.
- [38] Write a cpp program of working with single file. (Creates a file with constructor function).
- [39] Write a cpp program of working with multiple files (creates a file with open() function).