Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
V SEMESTER B.TECH DEGREE EXAMINATION(S), MAY 2019
Course Code: MR363
Course Name: OBJECT ORIENTED PROGRAMMING

Max. Marks: 100   Duration: 3 Hours

PART A
Answer all questions, each carries 5 marks.

1	List the object oriented concepts and give brief definition of any three concepts.	(5)
2	Write a C++ program to illustrate the use of class and object by read two values using a function Accept() and display it using function Display().	(5)
3	Define operator overloading and gives the rules for overloading an operator.	(5)
4	Illustrate function template with an example.	(5)
5	Differentiate single and multiple inheritance with an example.	(5)
6	Give the use of virtual keyword in C++.Illustrate with an example.	(5)
7	Define streams and stream objects in C++.	(5)
8	Write an example to show the input and output operations of streams .	(5)

PART B
Answer any three questions, each carries 10 marks.

9	a)	Write a program to show the use of a class by reading student details using getData() and Display() functions.	(6)
	b)	Write a C++ program to find the sum of N numbers	(4)
10	a)	Define Constructors. Also mention its features.	(3)
	b)	Differentiate constructor and destructor with proper examples.	(7)
11	a)	Illustrate the use of class template with an example.	(5)
	b)	Write a program to read and increment the value of two variables using unary operator overloading.	(5)
12	a)	Define Exceptions in C++.Give the mechanisms of handling exceptions in C++.	(10)
13	a)	Construct a C++ program to find the area of any two geometrical shapes using the concept of function overloading.	(6)
	b)	Describe the overloading of assignment operator with an example.	(4)

PART C
Answer any two questions, each carries 15 marks.

14   a)   Differentiate Multiple and Multilevel inheritance. Give implementation examples.   (10)

      b)   Explain the use of Virtual Base Class in C++.   (5)

15   a)   Explain about the composite objects in Runtime Polymorphism.   (7)

      b)   Summarise the public, private and protected modes and the access specifier of the members of Base class in the subclass when derived in this modes with an example.   (8)

16   a)   Define C++ Standard Template Library with its components.   (6)

      b)   Illustrate the file handling using file streams.   (9)

17   a)   List and explain about String class functions and constructors in C++.   (6)

      b)   Briefly explain about the random access of the files using file pointers.   (9)