P P SAVANI UNIVERSITY

FIRST ~~Second~~ Semester of B. Tech. Examination

May 2019

SECE1030 Object Oriented Programming with C++

27.05.2019, Monday   Time: 12:30 p.m. To 03:00 p.m.   **Maximum Marks: 60**

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

Q - 1	Answer the following. (Any Five)	[05]
(i)	C++ language is case _____.	
(ii)	A _____ is a sequence of characters surrounded by double quotes.	
(iii)	The smallest individual unit of a program is called _____.	
(iv)	Can you use destructor in your program?	
(v)	What is formal argument?	
(vi)	What is the syntax of inheritance of class?	
(vii)	How many types of inheritance are there in C++?	
Q - 2 (a)	Explain briefly characteristic of OOP language and mention advantages of OOP.	[05]
Q - 2 (b)	Explain function overriding with an example.	[05]

OR

Q - 2 (a)	Explain function overloading with an example.	[05]
Q - 2 (b)	What is meant by access modifiers? Explain all modifiers.	[05]
Q - 3 (a)	Define constructor. Explain various types of constructors with example.	[05]
Q - 3 (b)	What is inline function? When will you make inline function?	[05]

OR

Q - 3 (a)	Explain operator overloading in C++.	[05]
Q - 3 (b)	What is Encapsulation? Explain with an example.	[05]
Q - 4	Attempt any one.	[05]
(i)	Using the concept of function overloading write a program to find the maximum of three integer numbers.	
(ii)		

SECTION – II

Q - 1	Answer the following. (Any Five)	[05]
(i)	What is a static member?	
(ii)	What is the index number of the last element of an array with 9 elements?	
(iii)	What is template class?	
(iv)	What is the use of Namespace?	
(v)	Can we declare a member function private?	
(vi)	Write types of errors in C++.	
(vii)	What is user defined functions?	
Q - 2 (a)	What are different forms of Inheritance? Give an example for each.	[05]
Q - 2 (b)	Write a program to find factorial of a number.	[05]

OR

Q - 2 (a)	Explain call by value and call by reference with an example.	[05]

Q - 2 (b)	Write a program to overload unary increment (++) operator.	[05]
Q - 3 (a)	What is friend function? Explain the need of using friend function?	[05]
Q - 3 (b)	What are pure virtual functions in C++? Give an example.	[05]

OR

Q - 3 (a)	Explain runtime polymorphism with an example.	[05]
Q - 3 (b)	Write a short note on exception handling.	[05]
Q – 4	Attempt any One.	[05]
(i)	Write a program to check whether a character is a vowel or constant.	
(ii)	Write a program to Demonstrate hybrid Inheritances.	

****