Total No. of Questions : 8]		o. of Questions : 8] SEAT No. :			
PD-	40	77 [Total No. of Pages : 2			
		[6402]-37			
S.E. (Computer/AI & DS/Computer Science & Design/					
Computer Science Engg.)					
OBJECT ORIENTED PROGRAMMING					
(2019 Pattern) (Semester - III) (210243)					
Time	. 2				
Time: 2½ Hours] [Max. Marks: 70] Instructions to the candidates:					
	1)				
	<i>2</i>)	Figures to the right indicate full marks.			
	3)				
	4)	Draw neat & clean diagrams if necessary.			
Q 1)	a)	Compare Function Overloading and Function Overriding. [5]			
Q1)	b)	What is Virtual Function? Explain with example. [6]			
	c)	Write a program to overload binary operator using member function. [6]			
	• /	OR			
Q2)	a)	Explain Virtual destructor with Example. [5]			
~ /	b)	What is late binding and early binding? How are they implemented in			
		C++? Give the difference between the two types of binding. [6]			
	c)	Write a program to overload binary operator using friend function. [6]			
Q3)	a)	The I/O system of C++ contains which set of classes for file handling?[7]			
	b)	What are different ways to opening the file for reading and writing			
		operations?			
	c)	Explain the use of command line arguments. If we want to pass command			
		line arguments what will be prototype of main function and explain its			
		arguments along with example. [4]			
		OR			
Q4)	a)	What are cin and cout objects? Explain ios, istream, ostream and iostream			
		classes. [7]			
	b)	Write a program to create a file, read and write student records into it.			
		Every record contains Student Name, Roll Number and age. Store and			
		retrieve atleast 3 records. [7]			
	c)	What is a file mode? Describe the various file mode options available in			
		$C \neq +?$			
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Q 5)	a)	What is use of type name and export keywords?	[4]
	b)	What is generic programming? How is it implemented in C++?	[6]
	c)	Write a Note on 1) unexpected() function 2) terminate() func	tion
		3) User defined exception 4) Exception and inheritance.	[8]
		OR	5
Q6)	a)	Explain Rethrowing exceptions with Example.	[4]
	b)	Explain What is Function template and Class template using program	n.[6]
	c)	How exception specifications is used in exception handling	with
		example	[8]
Q 7)	a)	What is STL? List different types of STL containers.	[4]
	b)	How stack can be implemented using STL. Explain with program.	[6]
	c)	Write a program to illustrate STL heap sort.	[8]
		OR OR	
Q 8)	a)	Explain bidirectional and random access iterators with suitable exampl	e.[4]
~	b)	Write a program to implement binary search algorithm using STL.	[6]
	c)	Write C++ program using STL for sorting and searching user def	ined
		records such as Item records (Item code, name, cost, quantity etc) u	
		vector container.	[8]
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