NKT/KS/17/5303

Bachelor of Science (B.Sc.I.T.) Semester—II (C.B.S.) Examination **OBJECT ORIENTED PROGRAMMING USING "C++"**

Paper—II

Tim	e : T	hree Hours] [Maximum Marks : 5	0
	Not	e:—(1) All questions are compulsory and carry equal marks.	
		(2) Draw neat and labelled diagrams wherever necessary.	
	EIT	HER	
1.	(a)	Explain the various object oriented features in C++.	5
	(b)	How will you define a member function inside the class and outside the class ? How will you access the member function of a class ?	u 5
	OR		
	(c)	Explain the access specifiers in C++.	5
	(d)	Write a program in C++ to count the number of objects created and number of objects alive	e. 5
	EIT	HER	
2.	(a)	What is a constructor ? Explain copy constructor with an example.	5
	(b)	What is unary operator overloading? Write a program in C++ to overload the unary operator	r. 5
	OR		
	(c)	Explain the order of construction and destruction of objects in C++.	5
	(d)	What is operator overloading? Explain the rules for operator overloading. Also name thos operators which cannot be overloaded.	e 5
	EIT	HER	
3.	(a)	What are dynamic objects? How is a dynamic object created and destroyed?	5
	(b)	What is inheritance? Explain single inheritance with an example.	5
	OR		
	(c)	Explain the different types of inheritances available in C++.	5
	(d)	Write a short note on Constructor and Destructor in Derived classes.	5

EITHER

4.	(a)	What are virtual functions ? Explain pure virtual functions with an example.	5	
	(b)	Explain the Exception Handling model in C++.	5	
	OR			
	(c)	Explain the fault tolerant design techniques in C++.	5	
	(d)	How are uncaught exceptions handled ?	5	
5.	Attempt all:			
	(a)	Write a short note on static data members.	21/2	
	(b)	Differentiate between default constructor and parameterized constructor.	21/2	
	(c)	Write a short note on abstract classes.	21/2	
	(d)	Explain memory allocation failure exception.	21/2	