M.Sc. First Semester (Applied Electronics) (New) (CBS) 15003: Objected Oriented Programming C++ 1 AE 3

P. Pages: 2 AV - 3293 Time: Three Hours Max. Marks: 80 Notes: 1. Due credit will be given to neatness and adequate dimensions. 2. Illustrate your answer necessary with the help of neat sketches. 3. Use of pen Blue/Black ink/refill only for writing the answer book. 1. Write the applications of object oriented programming. a) 7 b) Describe different methods for defining constant in object oriented programming. OR 7 2. How are data and function organized in an object oriented program. a) b) What is structured programming? How OOP is different from structured programming. 7 3. 7 What are the advantages of function prototypes in C++? a) b) Explain with example. 6 In line function. Default arguments. OR Write a program to add two complex numbers C₁ and C₂ store the result in C₃ using 7 4. a) operator over loading. b) What is scope resolution operator? Explain with suitable program segment? 6 5. a) What is parameterized constructor and null constructor? Explain with proper program 7 segment in C++. 6 b) Explain friend function with example. OR 7 6. a) Write a program segment in C++ to demonstrate the concept of pointer to member. Explain public and private access specifier along with general syntax. 6 b) 7. What is inheritance? Explain different types with examples. a)

OR

What is visibility mode? What are different visibility modes? Explain.

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8.	a)	What is access specifier? Write and explain different access specifiers used in C++.	7
	b)	What is virtual base class? Explain with the help of suitable example.	7
9.	a)	Explain polymorphism. How virtual functions are used to implement dynamic polymorphism.	7
	b)	Write C++ program to overload the function named 'show' to display different type of data values.	6
		OR	
10.	a)	Explain following terms using program segment. i) Compile time polymorphism. ii) Run time polymorphism.	7
	b)	Explain obstruct base class.	6
11.	a)	Explain how a stream is used to in error handling.	7
	b)	Write a program to display following output. Object Object Oriented Object Oriented Program Object Oriented Object Oriented	6
		OR	
12.	a)	Explain fitting and padding in C++ streams by using suitable program segment.	7
	b)	Explain in detail.	6
		i) Insection operator.	
		ii) Extraction operator.	-

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