

## MAI-1101 Seat No.\_\_\_\_

## B. C. A. (Sem. III) Examination October / November - 2018

## 301: Object Oriented Programming Using C++

Time	e : 3	Hou	rs] [Total Marks :	70
1	(a)	Defir	ne following:	6
		(1)	Procedural Programming.	
		(2)	New and Setw Operator.	
		(3)	Enum data type.	
	(b)	Ansv	ver the following: (any two)	12
		(1)	Describe concept of OOPS.	
		(2)	What is the use of Reference Variable? Explain with example.	
		(3)	Explain Scope resolution Operator with example.	
2	(0)	Dofi	ne following :	
4	(a)	(1)		5
	4,	(2)	Call by value & Call by reference. Inline function.	
	(b)	Ansv	ver the following: (any two)	23
		(1)	What are characteristics of friend function? Write a program for friend function.	
		(2)	Explain function overloading with suitable example.	
		(3)	Explain multiple constructors.	

3	(a)	Answer the following:	
		(1) List out the operators that cannot be overloaded.	
		(2) How can we define operator function?	
		(3) What are conditions for casting operators?	
	(b)	Answer the following: (any two)	12
		(1) Explain unary operator overloading with example.	
		(2) Explain binary operator overloading using friend function.	
		(3) Describe class to basic and basic to class type conversion.	
4	(a)	Define following:	5
		(1) Pure virtual function.	
		(2) Types of polymorphism.	
	(b)	Answer the following: (any two)	12
		(1) Explain virtual base class with example.	
i in		(2) Explain multiple inheritance with example.	
		(3) Write brief note on this pointer.	