

RC-3734

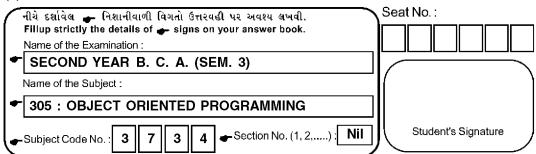
Second Year B. C. A. (Sem. III) Examination March / April - 2017

305: Object Oriented Programming

Time:	Hours]	[Total Marks: 70

Instructions:

(1)



- (2) All questions are **compulsory**.
- (3) Figures to the **right** indicate full marks.
- 1 Answer any ten.

10

- (1) What is static binding?
- (2) What is the application of scope resolution operator (::) in C++?
- (3) How does a constant defined by 'const' differ from the constant defined by the preprocessor statement '#define'?
- (4) What is Destructor?
- (5) List out the operators that cannot be overloaded.
- (6) What is pure virtual function?
- (7) What is the advantage of new over malloc ()?
- (8) What is the difference between private and protected visibility modes?
- (9) What is stream?
- (10) State the difference between ios::app and ios::ate mode.
- (11) What is constructor with default argument?

RC-3734] 1 [Contd...

2	Do	as directed:	15
	(a)	Explain function overloading with example.	7.5
	(b)	Explain any three concepts of OOP.	7.5
		OR	
2	(a)	What is the major use of data members and member	7.5
		functions as static? Explain it with example.	
	(b)	Explain reference variable. Give its application with	7.5
		example.	
3	Do	as directed:	15
	(a)	Explain constructor with example.	
	(b)	Explain operator overloading with example.	
		\mathbf{OR}	
3	(a)	What is inheritance? Explain multiple inheritance with example.	7.5
	(b)	What is containership? How does it differ from	7.5
		Inheritance ? Give example.	
4	Att	empt any two:	15
	(a)	Explain Exception handling in C++ with example.	
	(b)	Explain virtual base class with example.	
	(c)	Write a note on data abstraction and encapsulation	
	(d)	Demonstrate virtual base class with example.	
5 At		tempt any two:	
	(a)	Design a classes Rupee and Pound such that they support the followings :	
		Rupee R1, R2; Pound P1, P2;	
		P1 = R1 – Converts Rupee to Pound	
		R2 = P2 - Converts Pound to Rupee	
		Write a program in C++ which carries out conversion	
		operation.	

- (b) WAP to maintain telephone directory using Array of objects. Program should provide menu like
 - (1) Entry (Enter a new record)
 - (2) Search (Search the contact no. of given name, if exists)
 - (3) Display all entry
 - (4) Exit
- (c) Design single manipulators to provide the following output specification for printing float value.
 - (1) 15 column width
 - (2) 4 digit precision
 - (3) Left justified
 - (4) Filling unused space with '#'
 - (5) Display the trailing zeros.