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Reg. No.			

Question Paper Code: 51389

### B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016

#### Fifth Semester

#### Electrical and Electronics Engineering

### CS 2311/CS 59/10133 EE 604/10133 CS 304 - OBJECT ORIENTED PROGRAMMING

# (Common to Electronics & Instrumentation Engineering and Instrumentation Control Engineering)

(Regulations 2008/2010)

Time: Three Hours

Maximum: 100 Marks

# Answer ALL questions. $PART - A (10 \times 2 = 20 Marks)$

- 1. What is encapsulation?
- 2. Write the advantages of constructors and destructors.
- 3. What is operator overloading?
- 4. What is type conversion?
- 5. Define namespace.
- 6. What is reference variable?
- 7. List out the properties of friend function.
- 8. Write the use of final keyword.
- 9. Write the difference between function templates and class templates.
- 10. What is manipulator?

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## $PART - B (5 \times 16 = 80 Marks)$

11.	(a)	Expl	lain the features of object oriented program in detail.				
			OR				
•	(b)	Explain about constructors and destructors in C++ with example program.					
12.	(a)	Write brief note on the following with example:					
		(i) ·	Templates -	(5)			
		(ii)	Friend function	(5)			
		(iii)	Type conversion ·	(6)			
			OR				
	(b)	(i)	Explain about runtime polymorphism in detail with example program.	(8)			
		(ii)	Write note on Virtual functions with example program.	(8)			
13.	(a)	(i)	Explain about streams and formatted I/O operations in detail.	(8)			
		(ii)	Write brief note on file handling.	(8)			
			OR				
	(b)	(i)	Explain about Exception handling in detail with example program.	(8)			
		(ii)	Write note on the Standard Template Library.	(8)			
14.	(a)	(i)	Explain about Classes and Objects in Java with example program.	(8)			
		(ii)	Write brief note on Java byte code.	(8)			
			OR				
	(b)	Write note on the following with example:					
		(i)	Java packages	, (6)			
		(ii)	Virtual machine	(5)			
		(iii)	Arrays and Strings	(5)			
15.	(a)	(i)	Explain about thread concept in detail with sample program.	(8)			
	(~)	(ii)	Write brief note on interfaces with example program.	(8)			
		<b>\</b> /	OR				
	(b)	(i)	Describe about Inheritance and its types with example program.	(8)			
	(~)	(ii)	Explain about Streams and I/O operations in detail.	(8)			
		<b>\</b> /		(~)			