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## Question Paper Code: 91341

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Third Semester

Computer Science and Engineering

CS 2203/CS 35/CS 1202/080230004/10144 CS 304 — OBJECT ORIENTED PROGRAMMING

(Common to Information Technology)

(Regulation 2008/2010)

(Common to 10144 CS 304 — Object Oriented Programming for B.E. (Part-Time) First Semester — CSE — Regulation 2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- 1. Define: Data Abstraction, Encapsulation.
- 2. What are local classes? Give an example.
- 3. State the characteristics of the constructor function.
- 4. What is a destructor? How is it defined?
- 5. Mention the tasks performed by exception handling.
- 6. What is an exception specification?
- 7. What is a virtual base class?
- 8. What is a dynamic-cast operator?
- 9. What do you mean by stream in OOP?
- 10. Define namespace with syntax.

## PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	Explain briefly about the following term with suitable example:
11.	(a)	(i) Objects (4)
		(iii) Polymorphism (4)
		(iv) Methods and Message passing. (4)
		$\operatorname{Or}$
	(b)	Discuss about the need to use the default arguments with an example program. (8 + 8)
12.	(a)	(i) Explain about the Copy Constructor with an example. (5 + 5)
		(ii) State the difference between Constructor and Destructor. (6)
		m Or
	(b)	What is meant by operator overloading? Explain about overloading through Friend functions using an example code. (4 + 12)
13.	(a)	Explain briefly about the Exception handling mechanism with block diagram and write a suitable example program. (16)
		Or .
	(b)	Describe about the syntax of Catch and Rethrow an exception with an example. (8 + 8)
14.	(a)	What is meant by Inheritance? Discuss about the different form of inheritance with suitable example. (16)
		$\mathbf{Or}$
	(b)	Explain about the concept of Virtual function with a simple program and state the rules of Virtual functions. $(10+6)$
15.	(a)	Explain briefly about the features of Formatted console I/O system. (16)
		$\mathbf{Or}$
	(b)	Demonstrate with an example, how String Objects are created? How it can be modified? (8 + 8)