

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 × 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 ?

PART – B (5 × 16 = 80 Marks)

11. (a) Explain the features of object oriented program in detail. **(16)**
- OR**
- (b) Explain about constructors and destructors in C++ with example program. **(16)**
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)**
- OR**
- (b) (i) Describe about Inheritance and its types with example program. **(8)**
- (ii) Explain about Streams and I/O operations in detail. **(8)**