Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 77101

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

Fourth Semester

Electrical and Electronic Engineering

CS 6456 — OBJECT ORIENTED PROGRAMMING

(Common to Electronics and Instrumentation Engineering, Instrumentation and Control Engineering)

(Regulation 2013)

Time : Three hours | Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the advantages of object oriented programming over structured programming?
2. What is the advantage of an inline function?
3. What is meant by data abstraction?
4. What is a destructor? Illustrate with an example
5. What is a template?
6. What is an exception?
7. What is a byte code?
8. What is JVM?
9. What is an interface?
10. Write short notes on throw( ).

PART B — (5 × 16 = 80 marks)

11. (a) Explain the major principles of object oriented programming with illustrations and neat diagram. (16)

Or

(b) Explain the various operators that are available in C++ with neat illustration for each it. (16)

12. (a) Explain the various types of constructors that are available in C++ with suitable examples (16)

Or

(b) What is meant by polymorphism? Explain the various types of polymorphism in C++ with suitable examples. (16)

13. (a) What is a function template? Write a template function to sort arrays of float and int using bubble sort. (16)

Or

(b) What is inheritance? Discuss the various types of inheritance that are available in C++ with neat diagram (16)

14. (a) Discuss the various types of operators in Java and explain with suitable examples (16)

Or

(b) What is an access modifier? Differentiate between private, protected and public access modifiers with examples (16)

15. (a) Illustrate the use of try-catch clauses by sample statements of rare type of runtime error. (16)

Or

(b) What is multi threading? Write a multithreaded program in java and explain. (16)
