B.E. B.Tech DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016
Fourth Semester
Electrical and Electronic Engineering
CS 6456 — OBJECT ORIENTED PROGRAMMING
(Common to Electronics and Instrumentation Engineering, Instrumentation
and Control Engineering)
(Regulations 2013)
Time: Three hours Maximum: 100 marks
Answer ALL questions.

PART A — (10 x 2 = 20 marks)
1. What is meant by Object Oriented Programming?
2. Define abstraction.
3. State the uses of inline functions.
4. Define polymorphism.
5. What are the advantages of generic programming?
6. What is an exception?
7. “Java is platform independent language”. Comment.
8. Distinguish between overloading and overriding.
9. What is the use of multithreading?
10. Distinguish between class and interface.

PART B — (5 x 16 = 80 marks)
11. (a) (i) List out differences between procedure oriented programming and
object oriented programming.
(ii) List out the applications of OOPs. (9 + 7)

Or

(b) (i) Explain the characteristics of OOPs.
(ii) Write a C++ program to list out the prime numbers between the
given two limits. (8 + 8)
12. (a) (i) Explain function overloading in C++ with an example. (8)
    (ii) What are constructors? Explain the concept of constructors and
         destructors with an example. (8)

    Or

(b)  (i) Write a C++ program to overload + operator to add two complex
      numbers. (8)
    (ii) Explain the need for iterators using sufficient examples. (8)

13. (a) (i) Write a C++ program to generate user defined exception whenever
         user inputs odd numbers. (9 + 7)
    (ii) Explain function templates with an example.

    Or

(b)  (i) Explain multiple inheritance in C++ with examples. (10 + 6)
    (ii) List out the advantages of generic programming.

14. (a) (i) Highlight the features of Java. (6)
    (ii) Explain the different looping constructs of Java with examples. (10)

    Or

(b) Explain the types of inheritance in Java with examples. (16)

15. (a) (i) How do you add an interface to a package? Explain with an
        example. (8)
    (ii) How exceptions are handled in Java? Explain the important
         methods used to handle exception. (8)

    Or

(b)  (i) Explain multithreading with an example. (8)
    (ii) Explain any six methods available in the StringBuffer class. (8)