Reg. No. :						

## Question Paper Code: 91400

## B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019 Fourth Semester

Electrical and Electronics 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

 $(10\times2=20 \text{ Marks})$ 

- 1. Why oriented programming object is advantageous than structured programming?
- 2. Can a pointer be declared to a function which accepts one integer argument and returns an integer? Explain this with suitable C++ code.
- 3. What are the use of member function in C++?
- 4. Compare and Contrast Compile Time Polymorphism Vs Run Time Polymorphism.
- 5. What is meant by Generic programming?
- 6. Define Exception. Write the syntax of exception handling in C++.
- 7. Can you declare an array without assigning the size of an array? How is it advantageous from static intialization.
- 8. What are the different types of Inheritance supported by Java ?
- 9. Define package in java with syntax.
- 10. How strings are stored in Java?

## PART - B $(5\times13=65 \text{ Marks})$ 11. a) Explain the native data types and statements with suitable examples. (13)(OR) b) Write the algorithm for implementing ADTs in the base languages. (13)12. a) Explain the difference between data hiding and data abstraction. (13)(OR) b) Define Polymorphism. Explain the different types of polymorphism with example. (13)13. a) Define templates in C++. Differentiate the function template and class template with example. (13)(OR) b) Write a program in C++ to calculate area of the object depending upon the shape given as input use function overloading. (13)14. a) Explain the different control statements available in java with a suitable examples. (13)(OR) b) How an object array is created in java? Explain with example. (13)15. a) How to create and use a package in Java? What are the types of packages used in Java? (13)(OR) b) Discuss in detail on how exceptions are handled with an appropriate example. (13) PART - C $(1\times15=15 \text{ Marks})$ 16. a) Write a program in C++ to demonstrate the significance of inheritance. Use different types of inheritance and explain. (15)(OR) b) Write a program in Java to demonstrate the concept of interfaces and their implementation. (15)