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   (10×2=20 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   **(5×13=65 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   **(1×15=15 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)**

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