B. E. Third Semester (Computer Technology) / BECT – 18-19 – Rev – SoE – CT-201 Examination

Course Code : CT 2202   **Course Name : Object Oriented Programming**

Time : 2 Hours]   [Max. Marks : 40

Instructions to Candidates :—
   (1)   Attempt any **Four** questions out of **Six**.
   (2)   All questions carry **Ten** marks.
   (3)   Assume suitable data wherever necessary.
   (4)   Due credit will be given to neatness and adequate dimensions.

1.   (A1)   Demonstrate various features of OOP with illustrations.   6(CO1)

     (A2)   Differentiate between procedure oriented and object oriented programming.
                                                                           4(CO1)

OR

     (B1)   Demonstrate various benefits of OOP over procedure oriented programming.
                                                                           6(CO1)

     (B2)   Demonstrate the concept of class and object with example.   4(CO1)

2.   (A1)   Differentiate between function overloading and function overriding with example.
                                                                           6(CO1)

     (A2)   Write a program to demonstrate the concept of friend function. 4(CO1)

OR

     (B1)   Write a program to demonstrate the concept of operator overloading.
                                                                           6(CO2)

     (B2)   Write a program to demonstrate the concept of constructor and destructor.
                                                                           4(CO2)

3. (A1) Demonstrate various types of inheritances with illustrations. 6(CO2)

    (A2) Demonstrate the concept of virtual base class with example. 4(CO2)

OR

    (B1) Differentiate between compile time and run time polymorphism. 6(CO2)

    (B2) Demonstrate the concept of abstract class with example. 4(CO2)

4. (A1) Demonstrate various stream classes and their applications. 6(CO3)

    (A2) Write a program using command line arguments to copy a source file into destination file. 4(CO3)

OR

    (B1) Write a program to implement sorting using built in function sort(). 6(CO3)

    (B2) Write a program to implement the concept of function template. 4(CO3)

5. (A1) Demonstrate various types of exceptions. 7(CO4)

    (A2) Write a program to implement exception handling for ioexception. 3(CO4)

OR

    (B1) Demonstrate various components of MVC. 7(CO5)

    (B2) Demonstrate java web components and its architecture. 3(CO5)

6. (A1) Demonstrate java AWT hierarchy. 7(CO5)

    (A2) Demonstrate various commonly used event listeners. 3(CO5)

OR

    (B1) Write a program to demonstrate AWT by inheritance. 7(CO5)

    (B2) Write a program to demonstrate the concept of event listener. 3(CO5)

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