BTS-III (15)-11.16.1523 Reg. No. | | | | | | | | |

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B.Tech. Degree III Semester Examination November 2016

CS/IT 15-1304 OBJECT ORIENTED PROGRAMMING

(2015 scheme)

Time : 3 Hours Maximum Marks : 60

PART A

(Answer *ALL* questions)

$(10 \times 2 = 20)$

I. (a) Differentiate Data Abstraction and Encapsulation? Give Examples.

(b) Write a C++ program to demonstrate call by value and call by reference.

(c) What are the properties of static member function?

(d) Demonstrate friend function.

(e) Compare virtual function and pure virtual function.

(f) Write a program to declare an object to the class using pointer. Invoke the member functions getDetails() and putSalary() of employee.

(g) Show the steps of file operations.

(h) Explain any two file opening modes.

(i) Differentiate function overloading and function template with examples.

(j) What are the uses of file pointer?

PART B

$(4 \times 10 = 40)$

II. Write a program to calculate power of element using function with const arguments and default arguments. Write the advantages and declaration of inline functions.

OR

III. Explain the principles and precautions of function overloading with examples.

IV. Write a program to calculate the electricity bill using array of object. Class contains getData() and putData() to read and display the informations Consumer ID, Consumer Name, Last Reading and Current Reading of n consumers. Give specific unit charge.

OR

V. What are the rules for overloading operators? Write a program to overload ++ operator.

VI. Why is virtual base class used? How can we implement Base and Derived constructors in Multiple inheritance.?

OR

VII. What are the advantages of inheritance? Explain Hierarchical and Hybrid Inheritance with example.

VIII. What are the advantages of Exception Handling? How can we catch Multiple Exceptions?

OR

IX. Write a program to insert multiple lines to the file in the write mode. Count the number of vowels in the file in read mode.

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