PC-10084/NB

J-2/2111

OBJECT ORIENTED PROGRAMMING USING C++ – 214
(Semester–III)

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt *five* questions in all, selecting *two* questions each
from Section-A and B. Section-C is compulsory.

SECTION-A

I.   Explain the various characteristics of object oriented
     programming languages. Discuss in detail various advantages
     and disadvantages of object oriented programming
     languages.   (15)

II. What is a pointer variable? What are the applications of
     pointer variable? What are its advantages and disadvantages?
     What operations can be performed on pointer variables?
     What are basic data and derived data types which can be
     expressed in pointer variables?   (15)

III. Define functions. What are the advantages of using
     functions? What are the various methods of parameter
     passing to function? Explain.   (15)

IV. Discuss the following in detail :

(a) Recursion.   (5)

(b) Function overloading.   (5)

(c) How objects and classes are defined and accessed in C++?   (5)

SECTION-B

V. What is a static class member? Explain how a static member is defined and declared in C++. What are the merits and demerits of static data members over the global data variables?   (15)

VI. What is a default constructor? What is its significance? In what way it is equivalent to a constructor having default arguments? What are various types of default constructors? Explain with examples.   (15)

VII. What do you mean by base class? What are various types of base classes? Discuss each in brief giving their salient features.   (15)

VIII. What do you mean by operator overloading? Which operators cannot be overloaded? How can we overload unary and binary operators? Explain giving suitable examples.   (15)

SECTION-C

IX. (a) What do you mean by reference variable? (3)

(b) What is the significance of scope resolution operator?

(3)

(c) Write short note on inline function. (3)

(d) What do you mean by function redefining? (3)

(e) List various operations which can be performed on files in C++. (3)

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