

Roll No. 14037.....

Total No. of Pages : 2

CC : I 4.865

PC 2344-N

P-14/2115

OBJECT ORIENTED PROGRAMMING USING C++-214

Semester-III

Time Allowed : Three Hours]

[Maximum Marks : 75

Note :- Attempt *two* questions each from Sections A and B and the entire Section C.

SECTION—A

1. Define object oriented programming. What are its characteristics ?
Explain. 15
2. Define pointer. Distinguish between arrays and pointers. How pointer to function are declared and used ? Explain giving examples. 15
3. Define function. What are the different methods of parameter passing to functions ? Explain giving examples. 15
4. (a) Explain the concept of nested classes giving suitable example. 7.5
(b) What is a 'this' pointer ? What is its importance ? Explain. 7.5

SECTION—B

5. Define static data members and static member functions. How these are used ? Explain. 15
6. Define constructors and destructors. What are the different types of constructors ? What is the purpose of virtual destructor ? Explain. 15
7. (a) Define inheritance. What are the different types of inheritance ? Explain. 5
- (b) How ambiguity is resolved in multiple and hybrid inheritance ? Explain giving example. 10
8. Write a program to count the number of digits and alphabets in a text file. 15

SECTION—C

9. Attempt *all* questions :
- (a) What are const arguments ? 3
- (b) What are the multiple indirections ? 3
- (c) Define functions returning references. 3
- (d) Define pure virtual function. 3
- (e) Distinguish between function redefinition and function overriding. 3