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

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