

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

Dec-24-0312 (CBCS)

CS-302 (Object Oriented Programming Using C++)
[CSE, IT]

B.Tech. 3rd

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five question in all. Question no. 9 in Section E is compulsory. Rest attempt one question each from the Section A, B, C and D.

SECTION - A

1. (a) Differentiate between public, private and protected access specifiers. (5)
- (b) Discuss in detail about I/O streams. (5)
2. What is class? What is the relation between an object and a class? Write a programme which shows how to define a class, how to access member functions and how to create and access object in C++. (10)

SECTION - B

3. What is the ambiguity problem in case of multiple inheritance? How can it be removed? Explain with suitable example. (10)
4. (a) What is significance of virtual destructor? Explain with suitable examples. (5)
- (b) Write a program in C++ to overload Unary '-' operator to negate values of data member of class. (5)

SECTION - C

5. (a) What do you mean by binding? Explain static and dynamic binding with suitable examples. (5)

- (b) Write a C++ program to sort "n" members using pointers. (5)
6. (a) Differentiate between run time and compile examples. (5)
- (b) Describe this pointer with an example. (5)

SECTION - D

7. What is exception handling? Write a C++ program that illustrate exception handling. With the help of keywords try, throws and catch. (10)
8. (a) Differentiate between function template and class template using suitable examples. (5)
- (b) Explain the error handling concept during file operations. (5)

SECTION - E (Compulsory)

9. Define the following.
- (a) Define the pointer.
 - (b) Why are template function required?
 - (c) What do you mean by defiant arrangement?
 - (d) What is container?
 - (e) List down the keyword of exception handling and their usage.
 - (f) Define an enumerated data type in C++.
 - (g) What do you mean by inline function?
 - (h) Discuss & and * operator.
 - (i) Define the conversion.
 - (j) Describe the concept of re-throwing an exception. (10×2=20)