6. (a) Explain (i) Call by value (ii) Call by reference
(b) Write a program in C++ which read a set of reverse order.

7. (a) Explain Binary file
(b) What is OOA and OOD?
(c) What are the access modifier available in C++
(d) Explain object oriented paradigm.

8. What are the access modifier available in C++
class? Explain them with example.

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1. Select the correct answer of the following:

   (a) Cout in C++ is a:
   (i) Function (ii) Class (iii) Object

   (b) Group - A

   (Objective-type Questions)

   Answer all questions.

   The figures in the margin indicate full marks.

   Answer from both the Groups as directed.

   Candidates are required to give their answers in their own words as far as practicable.

   Full Marks: 80

   Time: 3 hours

   2 × 10 = 20
Member data:

Member function:

Constructor is a:

Not available in c++:

Instance of int:

Instance of int:

Instance of class:

Object is:


define F (u + 2) where u = 6:

The output of the following macro is if we call:

Object in C++:

Keyword in C++:

Header file in C++:

Function in C++:

Operation is:

Concatenate is called:

(2) ME - 7/1

(m) Data

(m) Else

(m) If

Array:

in C++

(3) ME - 7/1

Out of following which one is not the keyword:

Class

Object:

Function

Header file:

in C++ main() is also a

No of repetition is not fixed

Value for calculation

Condition

Fixed no of repetition

The for loop is best if we know:

Header file

May be

Extraction operator

Insertion operator

(b)
3. (a) Explain the following concepts: with example:

- (i) Pass by reference
- (ii) Pass by address
- (iii) Pass by value

(b) What is inline function? Explain with example.

(c) Continue statement

(d) Explain the following: 15 x 4 = 60

4. (a) What is the difference between structure and class?

- (ii) Basic Pay
- (ii) DA, HRA, etc.

5. Design an oop program in C++ to create the payroll of an organization by the following information:

- (i) Employee-Id
- (ii) Employee-Name
- (iii) Employee-ID
- (iv) Account number
- (v) Date of joining

(a) Pass any four questions of the following (long answer type questions)

Group B

- (i) Operator Overloading
- (ii) Constructor Overloading
- (iii) Virtual function

(b) Write a function in C++ which calculates the root of equation: $a x^2 + b x + c = 0$. Call this function in main program. Write a function in C++ which calculates the root of equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

(c) Write a function in C++ which calculates the root of equation:

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$