4. What do you know about destructors? Explain the different types of constructor with example.

5. How can one achieve runtime polymorphism in C++ ? Explain with suitable example.

6. What is file? What are the file stream classes? Explain.

7. What is multithreading? Explain the life cycle of multithreading.

8. Explain the applets. Differentiate between applet and application in Java.

9. How does string class differ from the string buffer class? Explain with example.

10. Write short notes on the following :

(a) Package

(b) Interface

(c) Static member.

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# 2 0 1 5

Full Marks : 100

Time : 3 hours

*The questions are of equal value*

Answer **five** questions including Question **1** which is compulsory

1. Choose the correct answers of the following :

(a) Friend function is defined

   (i) outside class

   (ii) inside class

   (iii) inside the constructor

   (iv) None of the above

(b) The manipulator endl is equivalent to

   (i) \n

   (ii) \t

   (iii) \b

   (iv) None of the above

(c) A destructor takes

   (i) one argument

   (ii) two arguments

*(iii)* three arguments

*(iv)* zero argument

(d) The operator << is called

   *(i)* an insertion operator

   *(ii)* put to operator

   *(iii)* either *(i)* or *(ii)*

   *(iv)* None of the above

(e) What is reference?

   *(i)* An operator

   *(ii)* An alias

   *(iii)* Rename an object

   *(iv)* None of the above

(f) The fields in a class of a C++ program are by default

   *(i)* protected

   *(ii)* public

   *(iii)* private

   *(iv)* None of the above

(g) Which one is not the keyword in Java?

   *(i)* default

   *(ii)* import

   *(iii)* main

   *(iv)* this

(h) Which one is not supported by Java?

   *(i)* Package

   *(ii)* Operator overloading

   *(iii)* Interface

   *(iv)* Applet

(i) A non-member function that can access the private data of a class is known as

   *(i)* friend function

   *(ii)* static function

   *(iii)* library function

   *(iv)* inline function

(j) Which type of inheritance is not supported by Java?

   *(i)* Single level

   *(ii)* Multilevel

   *(iii)* Multiple

   *(iv)* Hierarchical

2. What is the structure of C++ and how is a structure different from a class? Explain with example.

3. What is access control specifier? Explain the difference among private, protected and public access control specifiers.