BCA(II) — 201

2013

Time : 3 hours

Full Marks : 80

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

The questions are of equal value.

*Answer **five** questions in which Q. No. 1 is compulsory.*

1. Choose the correct option of the following questions :

    (a) When a language has the capacity to produce new data type, it is said to be :

    (i)   Reprehensible

    (ii) Encapsulated

    (iii) Overloaded

    (iv) Extensible

KT – 1/4   (Turn over)

(b) The get che( ) library function :

    (i) Returns a character when any key is pressed

    (ii) Returns a character when enter key is pressed

    (iii) Displays a character on the screen when any key is pressed

    (iv) Does not display a character on the screen

(c) The && and II operators :

    (i) Compare two numeric values

    (ii) Combine two numeric values

    (iii) Compare two Boolean value

    (iv) Combine two Boolean values

(d) A function argument is :

    (i) A variable in the function that receives a value from the calling.program

    (ii) A way that functions resist accepting the calling program's values

(iii) A value sent to the function by the calling program

(iv) A value returned by the function to the calling program

(e) A static local variable is used to :

    (i) Make a variable visible to several functions

    (ii) Make a variable visible to only one function

    (iii) Conserve memory when a function is not executing

    (iv) Retain a value when a function is not executing

(f) You can read input that consists of multiple lines of text using :

    (i) The normal cout < < combination

    (ii) The cin.get ( ) function with one argument

(iii) The cin.get ( ) function with two arguments

(iv) The cin.get ( ) function with three arguments

(g) Assume a class C with objects obj1, obj2 and obj3. For the statement obj 3 = obj1 − obj2 to work correctly, the overloaded − operator must :

(i) Take two arguments

(ii) Return a value

(iii) Create a named temporary object

(iv) Use the object of which it is a member as on operand

(h) Navigability from class A to class B means that :

(i) An object of class A can call an operation in one object to class B

(ii) There is a relationship between class A and class B

(iii) Objects can go from class A to class B

(iv) Messages from class B are received by class A.

2. You can convert temperature from Degree Celsius to Degree Fahrenheit, multiplying by $\frac{9}{5}$ and adding 32. Write a program that allows the user to enter a floating-point number representing Degree Celsius, and then displays the corresponding Degree Fahrenheit

3. What is POP and OPP ? What are the differences between POP and OPP ? Discuss the features of POP. Describe how data are shared by the functions in procedure oriented programs.

4. Define data members, member function, private and public members with example.

5. Write a C++ program, to find the factorial of a non-negative integer using a constructor and a destructor (generating the message "you have done it").

6. Why is it necessary to include the file isostream in all our programs ? What is the role of iomanip file ? What is the basic difference between manipulates and ios member functions in implementation ?

7. What is a function ? How will you define a function in C++ ? Define inline function. When will you make a function inline and why ?

8. What do you mean by dynamic initialization of objects ? Why do we need to do this ? How is dynamic initialization of objects achieved ?

KT – 1/4   (6)   Contd.

9. Write short notes on any **two** of the following :

   (a) Inheritance

   (b) Polymorphism

   (c) Identifiers and constants

   (d) Recursion

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