B.C.A. (PART-I) 2nd Semester Examination-2022

B.C.A.

(Introduction to Object Oriented Programming & C++)

Paper : BCA-204

Time : Three Hours]   [Maximum Marks : 70

Note: (i)   Answer **five** questions in all.

(ii)   Question **No. 1** is compulsory.

(iii)   Answer two questions from section **A** and **B** each.

(iv)   All question carry equal marks.

1.   Answer all parts of the following:

(a)   What do you mean by oops?

(b)   Define class and object.

•(c)   Define and explain Function with default parameters.

•(d)   What do you mean by static member function?

Section-A

2. What do you mean by Inheritance in object oriented programming? Explain types of inheritance supported by C++.

3. Explain Function overloading with proper example.

4. Write a program in C++ to check whether a given number is prime or not using the below mentioned class definition.

Class Prime

{

int num;

public:

void input (int x);

void check PRIME ();

};

5. What do you mean by inline function in C++. Explain with example.

Section-B

6.   (a)   Explain constructors. Explain the order of constructor call in multilevel inheritance with example.

      (b)   What do you mean by Friend function?

7.   (a)   Write a C^{++} program to print all the factors of a given input number.

      (b)   What do you mean by type conversion? Explain all the types of conversion supported by C^{++}.

8.   (a)   Explain the various access specifier. Give clear differentiation between private and protected access specifier.

      (b)   Explain operator overloading with proper example.

9.   Write notes on any two of the following:

      (a)   Destructors in C^{++}

      (b)   Boolean data type

      (c)   Scope Resolution Operator

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