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## BCAS2612

BCA., Semester Second
Examination, 2024-25
COMPUTER SCIENCE
Paper - Second
[Introduction to C++]

[Time : 3 Hours] [ Maximum Marks : 70]

Note: The question paper contains two sections. Section

A contains 08 short answer type questions.

Attempt any 05 questions from this section. Each question carries 05 marks. Section B contains 05 long answer type questions. Attempt any 03 questions from this section. Each question carries 15 marks.

BCAS2612/3

(1)

[P.T.O.]

## SECTION - A (Short Answer Type Questions)

Note: Attempt any 05 questions out of 08 given.

(5×5=25)

 What do you mean by recursion? Write a recursive function to find the nth term of Fibonacci Series. What is the role of destructor? Explain with suitable example.

3. Explain inline functions in C++ with example.

Define Stream classes with suitable example.

5. What is friend function? Explain with example.

6. Explain various loops in C++ with example.

 Write a program in C++ to find factorial of any number.

 Write short notes on Base classes and derived classes.

BCAS2612/3

(2)

## (Long Answer Type Questions)

Note: Attempt any 03 questions out of 05 given.

(3×15=45)

 Describe various types of inheritance in C++. Write a C++ program to illustrate multiple inheritance.  Describe various operators in C++ with the help of suitable examples.

 What is operator overloading? Write a program in C++ for operator overloading.

12. Write short notes on:

(a) Array

(b) Structure

(c) Pointers

13. What is object oriented programming? What are the main characteristics of OOP also describe its basic concepts. Compare object oriented programming with procedure oriented programming.