

6429 – C04 – IIIS BSc (CS) – N – 19

THIRD SEMESTER B.Sc. (CS) DEGREE EXAMINATION, NOVEMBER 2019

OOP'S USING C++

Time : 3 Hours]

[Max. Marks : 80

Answer any five full questions.

- I. a) What is OOP and explain its characteristics.
b) Explain data abstraction and encapsulation.
c) Explain cin and cout with example. 8 + 4 + 4 = 16
- II. a) Explain inline function with an example.
b) Explain manipulators and briefly explain them.
c) Explain new and delete operators with syntax. 6 + 6 + 4 = 16
- III. a) Write a C++ program to demonstrate stack operation.
b) What is friend function? Explain with example.
c) What is constructor? 8 + 6 + 2 = 16
- IV. a) What is type conversion? How to convert from class type to basic data type.
b) Write a program to add two matrices using (+) operator overloading. 8 + 8 = 16
- V. a) Explain the following:
i) Single inheritance
ii) Multiple inheritance
iii) Multilevel inheritance. 8 + 8 = 16
b) Explain private public protected access specifier.
- VI. a) Explain virtual function and pure virtual function.
b) Explain class template with example. 6 + 8 + 2 = 16
c) What is exception?
- VII. a) Write a C++ program to sort an array using function template. 8 + 8 = 16
b) Define file. Explain any four file operations.
- VIII. Write short notes on any four:
a) Scope resolution operator
b) Default argument
c) This operator
d) Difference between C and C++
e) Stream class
f) Overriding function. 4 × 4 = 16