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AA—06—2019

FACULTY OF SCIENCE

B.Sc. (CS) (Second Year) (Third Semester) EXAMINATION

OCTOBER/NOVEMBER, 2019

(Revised Course)

COMPUTER SCIENCE

(Object Oriented Concepts and Programming in C++)

(Thursday, 14-11-2019)   **Time : 2.00 p.m. to 5.00 p.m.**

Time—3 Hours   *Maximum Marks*—80

N.B. :— (i) Attempt *All* questions.

   (ii) Figures to the right indicate full marks.

   (iii) Use suitable data, if necessary.

1. Attempt the following :   20

   (i) What are the advantages of OOPs ?

   (ii) What is class ? Explain.

   (iii) What is Inline Function ? Explain.

   (iv) Describe virtual function in detail.

2. (a) Explain in detail data types used in C++.   8

   (b) Describe in brief friend function.   7

Or

   (c) Write a program in C++ using static class members.   8

   (d) What is constructor ? Explain in detail copy constructor. 7

3. (a) Explain in detail concepts of function overloading.   8

   (b) Write a program in C++ for unary operator overloading.   7

P.T.O.

Or

(c) What is Inheritance ? Explain the multilevel inheritance with example. 8

(d) Explain in detail pure virtual function. 7

4. (a) Write a program in C++ using call by value. 8

(b) Explain in detail Manipulators. 7

Or

(c) Describe the concept file updation with random access. 8

(d) Explain try and catch primitives with suitable examples. 7

5. Attempt any *three* of the following : 15

(i) Object

(ii) Formatted I/O console in C++

(iii) Destructor

(iv) C++ stream classes

(v) Type conversion in C++.