(4)

(b) What do you mean by function? Write a C++ Program to Compute the factorial of a given number. 3

7. (a) Define Inheritance? Explain different types of inheritance with suitable example.

4½

(b) What do you mean by Inline function. Explain with suitable example. 3

Unit - IV

8. (a) What are file modes? Describe various file made options available in C++ with suitable example. 4½

(b) What are the steps involving opening and closing of files? 3

9. Explain the following 7½

(i) Library Function

(ii) Data types in C++

(iii) Friend Function

(iv) Late binding

A (Printed Pages 4)

Roll No. _____

S-755

B.Sc. (Part-II) Examination, 2015

(New Syllabus)

COMPUTER SCIENCE

Paper-II

(C++ and Object Oriented Programme)

Time Allowed : Three Hours] *[Maximum Marks : 50*

Note: Answer five questions in all. Question No. 1 is compulsory. Attempt one question from each of the four Units.

1. (a) Why do we include iostream. b file in C++ Programs? $2 \times 10 = 20$

(b) State the problems in procedural Programming?

(c) What are necessary conditions for a language to be object oriented?

(d) Define the terms classes and objects with examples.

(e) How will you achieve information hiding in C++?

(2)

(f) What is the advantage of Inheritance in C++? Explain.

(g) What are the operators that cannot be overloaded?

(h) What is the major difference between while and DO-while statements in C++?

(i) Define Token in C++ Programming?

(j) Emplain logical operators in C++ with suitable example?

Unit - I

2. (a) Compare and contrast the procedure oriented and object oriented approach. 4½

   (b) Explain conditional operators in C++ with suitable example? 3

3. Explain various forms of IF Statements in C++? Write a C++ Program to read students name and his test score, that converts a test score into its equivalent grade. (Use only else-if statement) based on the following conditions. 7½

   test score > = 90 grade : A

   test score > = 80 and < 90 grade : B

   test score > = 70 and < 80 : grade : C

   test score > = 50 and < 70 grade : D

   test score < = 50 grade : Fail

(3)

Unit - II

4. (a) What is operator overloading? How will you define it? Illustrate Unary operator overloading with an example? 4½

   (b) Explain the use of For loop in C++ Programming? Write a C++ Program to Print a pattern similar to the following pattern.

   ```
   *    *    *    *    *    *
   *    *    *    *    *
   *    *    *    *
   *    *    *
   *    *
   *
   ```
   3

5. (a) What do you mean by Array? Write a C++ Program to Multiply two [3×3] matrices 4½

   (b) Explain the following statement 3

   (i) Break

   (ii) Continue

   (iii) GO-TO

   Unit - III

6. (a) What is the difference between Call by value and Call by reference? Explain with suitable example. 4½