

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2012 Admission

IIIrd Semester Final Examination- December /January -2013

Cat. No: Basc.2107

Marks: 80

Title: Computer Programming (1+1)

Time: 3 hours

1. A) State whether the following statements are valid in C++ (Q.Nos 1 to 5) (10x1=10)

- 1) Char string[4]="xyz";
- 2) float sum=0;
- 3) float area= π * rad * rad;
- 4) int *p=new int; where p is a pointer of type int.
- 5) t4=New Delhi

B) Find errors if any:- (Q. Nos 6 to 8)

- 6) long float x;
- 7) int code=three;
- 8) int *p=new;

- 9) An unsigned integer can be twice as large as signed Integer. Explain how
- 10) What is a reference variable? What is the significance of this variable?

II. Write short notes on any ten:-

(10x3=30)

- 1) Distinguish between variable and constants.
- 2) What is the use of function putdata() and getdata().
- 3) Write short note on Hierarchy of Arithmetic operators.
- 4) Explain unconditional branching statement.
- 5) What is polymorphism.
- 6) What is a file mode? Describe the various file mode options available.
- 7) Differentiate between recursion and iteration.
- 8) Explain the use of keyword struct().
- 9) What is operator overloading?
- 10) What is a virtual base class?
- 11) What is the use of the pointer.
- 12) Explain the use of cin and cout.

III. Write short essays on any six:-

(6x5=30)

- 1) Write a program in C++ to check whether the given number is prime or not.
- 2) Write a program in C++ to find the sum of odd numbers from 1 to 15.
- 3) Explain Simple IF and IF...ELSE statement.
- 4) Explain the difference between Do.. While and While statement.
- 5) Explain FOR Loop with an example.
- 6) Write short note on FILES.
- 7) Write a program in C++ to reverse a given number.
- 8) Write a program in C++ to solve quadratic equation.

IV. Write essay on any one:-

(1x10=10)

- 1) Explain One dimensional and two dimensional array. Write a program in C++ to find the largest of n numbers using FOR LOOP and array.
- 2) Write a program in C++ to store a 3x3 matrix and rotate the columns according to the number of rotations.

Example:-

Original matrix

3	1	4
4	0	6
7	9	2

Output (Rotations=2)

1	4	3
0	6	4
9	2	7