KERALA AGRICULTURAL UNIVERSITY B.Tech.Food Engg. 2015 Admission IIIrd Semester Final Examination-January 2017 Cat. No: Basc. 2107 Marks: 50 Title: Computer Programming (1+1) Time : 2 hours I. Answer the following: (10 x 1=10)1. What is a type cast operator? 2. What is the importance of header files. 3. What is the use of inline function in C++? 4. What are the applications of void data type in C++? 5. The size of a char array that is declared to store a string should be one larger than the number of characters in the string. Why? 6. Write a function using reference variables as arguments to swap the values of a pair of integers. 7. Explain an array. How will you define arrays of different types. Give examples. 8. Explain any two header files in C++. 9. What is the main advantage of passing arguments by reference? 10. What do you mean by overloading of a function? When do we use this concept? II. Write short notes/answers on ANY FIVE: (5x 2=10)1. What is class? How does it accomplish data hiding? 2. How is a member function of a class defined? 3. What is a friend function? What are the merits and demerits of using friend function? Explain Polymorphism in C++ with an example. 5. What is a constructor? How do you make a constructor function? 6. What are the different forms of inheritance? Give an example of each. 7. What is an abstract class? III Write answers on ANY FIVE: $(5 \times 4=20)$ 1. Write a program in C++ to check whether the given number is odd or even. 2. Write a program in C++ to find the factorial of a given number. 3. What do you mean by call by value and call by reference. Give example. 4. Explain Switch 0 statement with example. 5. Explain Do While statement with example. 6. Write a program in C++ to find the sum of digits of a given number. Write a program in C++ to find the number of even numbers between 1 and 15.

IV. Write essay on any ONE

 Write a program in C++ to read register number and marks in 5 subjects and print the result based on the calculations given below-:

if percentage>=80 result is Distinction.

If percentage<80 and >=60 result is First Class

if percentage>=60 and <50 result is second class otherwise Failed

 Write a program in C++ to read n numbers into an array and sort the numbers in ascending order.

$(1 \times 10 = 10)^{-1}$

A.L.