# KERALA AGRICULTURAL UNIVERSITY

B.Tech.Food Engg. 2015 Admission
IIIrd Semester Final Examination-January 2017

Cat. No: Basc. 2107

Title: Computer Programming (1+1)

Marks: 50 Time: 2 hours

#### I. Answer the following:

 $(10 \times 1=10)$ 

- 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?
- 4. 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.
- 7. Write a program in C++ to find the number of even numbers between 1 and 15.

## IV. Write essay on any ONE

 $(1 \times 10=10)$ 

- 1. 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
- 2. Write a program in C++ to read n numbers into an array and sort the numbers in ascending order.