

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2014 Admission  
III<sup>rd</sup> Semester Final Examination-January -2016

Cat. No: Basc.2107

Marks: 50.00

Title: Computer programming (1+1)

Time: 2 hours

## I Answer all questions

(10 x 1=10)

1. Define class
2. Which allows you to create a derived class that inherits properties from more than one base class
3. What does C++ append to the end of a string literal constant
4. The keyword used to transfer control from a function back to the calling function is \_\_\_\_\_
5. Run Time polymorphism is achieved by \_\_\_\_\_
6. Name the header file to be include for the use of built in function isalnum ()-
7. What is the output of given code fragment  
int f = 1, i=2  
while (++ i<5)  
f\* = I ;  
cout<<f ;
8. A class defined within another class is :
9. Define Static data type
10. Which feature in OOP allows reusing code

## II Write short notes on any Five questions

(5 x 2=10)

1. Explain pointers in C++ with an example
2. Write a C++ program to calculate the area of triangle
3. What is polymorphism
4. What is a COPY CONSTRUCTOR and when is it called
5. Define private, protected and public access control, with examples
6. What are the differences between overloaded functions and overridden functions
7. Differentiate between while and do-while statement with examples. what are friend functions

## III Write short essay on any FIVE questions

(5 x 4=20)

1. What is multilevel inheritance ?How is it different from multiple inheritance

2. Write a program in C++ which calculates the factorial of a given number
3. What are the basic concepts of object oriented programming
4. What are recursive functions .Write the advantages and disadvantages of recursive algorithms
5. What are tokens in C++
6. What will be the result of the following expressions when they are executed in sequence

...

```
int a = 10 ;
```

```
int b = 20;
```

```
c = ++a + ++a + ++a ;
```

```
b = b++ + b++ ;
```

```
e = a++ + --a + b--;
```

```
f = b -- & ++a + b++
```

```
cout << c << d << e << f ;
```

...

7. Explain the meaning of polymorphism. Describe how polymorphism is accomplished in.

#### IV Write essay on any ONE

(1 x 10=10)

1. Write a program to open a file in C++ "Hello.dat" and write  
 "This is only a test"  
 "Nothing can go wrong"  
 "All things are fine"  
 Into the file .Read the file and display the contents
2. a) What are the different storage classes in C++  
 b) Write a program to overload the operator '+' for complex numbers