KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg) Degree Programme 2015 Admission
IInd Semester-Final Examination-June/July-2016

Cat. No: Comp.1201 **Marks: 50**
Title:Computer Programming and Data Structures (1+1) **Time : 2 hours**

I (a) Answer all the questions **(10 x 1 = 10)**

1. Which of the following is a correct format for declaration of function?
   a) return-type function-name(argument type);
   b) return-type function-name(argument type){}
   c) return-type (argument type)function-name;
   d) none of these

2. Which of the following is not a valid C variable name?
   a) int num1 b) float rate c) int v_count d) int $main

3. Result of a logical or relational expression in C is
   a) True/False b) 0/non zero c) +/- d) none of these

4. Which among the following is not a logical or relational or equality operator?
   a) != b) == c) && d) =

5. C language has been developed by
   a) Ken Thompson b) Dennis Ritchie c) Peter Norton d) Martin Richards

6. To return the control back to the calling function, we must use the keyword
   a) return b) static c) new d) volatile

7. #include statement must be written
   a) Before main() b) Before any scanf/printf c) After main() d) can be written anywhere

8. The preprocessor provides the ability for _____.
   a) The inclusion of header files

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b) The inclusion of macro expansions

c) Conditional compilation and line control.

d) All of these

9. Which of the following are themselves a collection of different data types?

a) string b) Structures c) char d) All of these

10. User-defined data type can be derived by _____

a) struct b) enum c) typedef d) All of these

II Write short notes on any FIVE **(5 x 2=10)**

1. What is a structure? How does it differ from a union?
2. What is the use of library functions in C?
3. What is the difference between break and continue statement?
4. How are multi dimensional arrays defined?
5. What is meant by automatic and extern storage classes?
6. Differentiate between local variable and global variables.
7. What is recursion? How is it useful in programming?

III. Write short notes on ANY FIVE of the following **(5x 4=20)**

1. Write a C program to print the sum of 100 integers.
2. Explain basic file operations in C.
3. Explain different data types and sizes.
4. Explain initialization of pointer variables in C.
5. Explain header files in C.
6. Explain increment and decrement operators with example.
7. Explain stacks and queues with example.

IV. Write essay on ANY ONE of the following **(1 x 10=10)**

1. Explain quick sort and merge sort with example
2. Explain doubly linked list with suitable example

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