



KERALA AGRICULTURAL UNIVERSITY
B. Tech.(Food Technology) 2023 & Previous Admission
II Semester Re Examination – August 2026

Beas.1205

Information Technology and Computer Programming (1+2)

Marks: 50
Time: 2 hours

I Fill in the blanks

(10x1=10)

1. The word COMPUTER is abbreviated as
2. The person who designed and built the first mechanical computer and Difference Engine is
3. The range of values that can be stored in a variable of type int is
4. The smallest unit of data in a computer is called as a
5. A C preprocessor command has a as its first character.

Answer the following

6. Let `int a[]={45,55,65,78,88,98,108}`. What is the value of `a[78%4]`?

7. `int *p, b=10;`

`p=&b;`

`*p +=2;`

What is the value of `*p` and `b`?

State True or False

8. `fopen("E:\\Programs\\sample.bin","rb");` This statement opens the binary file in read only mode.
9. "To represent a string in C, add '\0' at the beginning of the character array".
10. Do while is called as entry controlled loop.

II Write short notes on ANY FIVE of the following

(5x2=10)

1. What are the components of CPU?
2. Represent the decimal value $(1024)_{10}$ in $(?)_{16}$.
3. Define LAN and WAN with one real time example.
4. What is a union in c? Write its syntax.
5. List the different types of relational operators in C.
6. Write a recursive function to find the factorial of the given number.
7. What is an Operating System? List its types.

III Answer ANY FIVE of the following

(5x4=20)

1. Consider the below code snippet and Predict the output:

```
#include <stdio.h>
int main()
{
    int a = 10, b = 100, e,f;
    float c = 10.5, d = 100.5, g;
    e=a+b--;
    g=++c/a;
    printf("e= %d \n",e);
    printf("g= %f \n",g);
    printf("a = %d \n", ++a);
    printf("b = %d \n", --b);
    printf("c = %f \n", ++c);
    printf("d = %f \n", --d);

    return 0;
}
```

2. Distinguish Compiler and Interpreter.
3. Draw the flowchart for finding the greatest of three numbers.
4. Explain the storage classes in C.
5. Illustrate with an example the scope, visibility and lifetime of a variable in c.
6. Explain the steps involved in execution of a C Program.
7. Define a structure named Student containing reg_no, name, birth_year, and institute_name. Create the array of structures holding the record of 4 students and write the statement for accessing the first student record.

IV

Write an essay on ANY ONE of the following

(1x10=10)

1. Write a C program to print the season (Winter, summer, spring and Autumn) of the given month using switch statement. Prompt the user to enter the menu choice 1 for January, 2 for February, ... 12 for December. Ask the user to enter -1 if he want to quit, else display menu again.
2. Explain the various functions involved in handling the File I/O(text and binary files) in C with suitable examples.
