

B.Sc. T.Y. (Part-III) (CBCS Pattern) Sem-VI  
**USELT14 - Electronics Paper-II - Elective-I : C Programming-II**

P. Pages : 2

Time : Three Hours



**GUG/W/22/13350**

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Use either ANSI-C or TURBO C for program writing

Either:

1. a) What is array? Discuss syntax, declaration and initialization of one dimensional array in 'C' language. **6+4**  
Write a program in 'C' which will read two matrices and find their sum.

**OR**

- b) What is user define function? Explain its need. State the category of functions and explain any one of them with suitable example. **1+2+3+4**

Either:

2. a) What is 'Structure' in 'C'? How does it differ from an 'array'? Explain the structure initialization with an example. **2+2+6**

**OR**

- b) Explain an union with suitable example. How does it differ from structure? For what kind of applications are union useful. **5+3+2**

Either:

3. a) Discuss in detail opening and closing of a file. Write a program to read data from the keyboard, write it to a file called INPUT, again read the same data from the INPUT file, and display it on the screen. **6+4**

**OR**

- b) Explain the following functions: **5+5**  
i) ftell()  
ii) fseek()  
Write a program to demonstrate the use of ftell and fseek function.

Either:

4. a) Explain the concept of object oriented programming (OOP). **5+5**  
State and explain any two applications of OOP.

**OR**

- b) Describe 'Cin' and 'Cout' operation in C++? **5+5**  
Write a program in C++ to find area of rectangle.

5. Attempt **any ten** of the following.

**1x10**  
**=10**

- i) Give general syntax of two dimensional array.
- ii) Define a scope of variables in a function.
- iii) What do you mean by call by value?
- iv) State the advantage of using pointers in C.
- v) What is String?
- vi) Differentiate between pointer and array.
- vii) What is the use of fscanf()?
- viii) What is the use of rewind()?
- ix) Give the syntax for closing file.
- x) What is Manipulators?
- xi) Give any two characteristics of OOP.
- xii) Distinguish between C and C++.

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