Department of Computer Applications

Semester - I

Subject : Programming in C **Sub code: CA101S**

Unit-I

1. Write the Character set in C.
2. What is Token? Explain.
3. What is an Identifier? Write the rules for naming the identifier.
4. What are the basic data types available in C?
5. Write the Keywords in C.
6. What is mean by Expression?
7. Describe the two ways for declaring floating variable.
8. Explain Library function in C.
9. Write about Constants in C.
10. Summarize the escape sequences in C.
11. What is Variable? How can be it declared?
12. Write short hand operators in C.
13. Explain the precedence of operators.
14. Write a C program for Conversion of Fahrenheit to Celsius.
15. Explain increment and decrement operators.
16. Discuss about the structure of C program.
17. Write all C operators.
18. What is the purpose of type declarations? What are the components of type declaration?

Unit-II

1. What is mean by pre-processor in C?
2. Explain formatted input and output function in C.
3. Write about format specifiers in C.
4. What is the use of \n and \t.
5. Explain scanf and printf function in C.
6. Write the functions for handling character data.
7. Explain Simple if statement.
8. Write a C program for Largest among two numbers.

9. Write a C program for Nested-If statement.
10. What is the difference between while and do-while statement.
11. Write a C program for print the sum of series
    S=1+2+3.....10
12. Explain Looping structure in C.
13. Write the syntax for switch-case. Give example.
14. Write a C program for Arithmetic operations using switch-case.
15. Write a C program for Check whether a given number is Armstrong or not.
16. Explain break and continue with example.
17. What is the use of goto statement?
18. Write a C program to print Fibonacci Series.

Unit-III

1. Define Function. Explain its types.
2. Explain function prototype.
3. What is mean by Recursion? Give example.
4. Write a C program for factorial of a given number.
5. Explain about call by value
6. Explain about call by reference.
7. What are the String Handling functions in C.?
8. Write C program to find the Length of string.
9. What is an array? Explain.
10. Write a C program to sort n numbers.
11. Write a C program for Matrix Addition.
12. What is mean by formal parameters?
13. Write a C program for Matrix Multiplication.
14. How to initialize two dimensional array in C?
15. Write in detail about one dimensional and multidimensional arrays. Also write about how initial values can be specified for each type of array.
16. In what way array is different from an ordinary variable?
17. What conditions must be satisfied by the entire elements of any given array? What are subscripts?

Unit-IV

1. What is Structure in C.?
2. What is the difference between struct and union.

3. Explain Functions with array as argument.
4. Discuss about storage classes in C.
5. Discuss about function with structure.
6. Explain array of structure.
7. Write a C program to read the information from the keyboard in which the "Employee" structure consists of employee name, code, designation and salary. Construct an array of structures that stores n employees information and write a program to carry out operations like inserting a new entry, deleting entry**.**
8. The annual examination is conducted for 50 students for three subjects. Write a program to read the data and determine the following:
   a. Total marks obtained by each student.
   b. The highest marks in each subject and the Roll No. of the student who secured it.
   c. The student who obtained the highest total marks.
9. Write a C program to compute the monthly pay of 100 employees using each employee' s name, basic-pay. The DA is computed as 52% of the basic pay. Gross-salary (Basic pay +DA). Print the employees name and gross salary.
10. Explain Self referential structure.
11. Write a C program to print maximum marks in each subject along with the name of the student by using structures. Take 3 subjects and 3students records.
12. Write a C program to illustrate the comparison of structure variables.

Unit-V

1. What is Pointer?
2. Explain array of pointer.
3. Write a C program for swapping of two number using pointers.
4. Explain the operators & and *.
5. Write a program to declare pointer as members of structure and display the contents of the structure. Define a structure object, boy with three fields: name, age and height.
6. Write a C program using structure to create a library catalogue with the following fields; Access number, author's name. Title of the book, year of publication, publisher's name, price using pointer.

7. What is the task performed by fseek( ) function. What is its syntax? Explain each parameter in it
8. .Explain the command line arguments. What are the syntactic constructs followed in C.
9. Define File. How to open and close a File.
10. Explain all file operations in C.
11. Write a C program for Sequential File.
12. Write a C program for student marklist using File.
13. .Write a program to read an input file and count the number of characters in the input file.
14. Write a program to open a pre-existing file and add information at the end of file.
15. Write a C program to read the text file containing some paragraph. Use fseek() and read the text after skipping *n* characters form beginning of the file.

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