



Pop sem questions

Principles of programming using C (Visvesvaraya Technological University)



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Module - 1

1) What is a computer?

i) Give the characteristics of computer

2) Explain the Generation of computer and give the classifications of computer

3) With a neat diagram explain basic organization of computer.

i) Applications of computer.

list &

4) Explain Input & output devices

i) ~~List & explain~~

5) Explain the characteristics of C & uses of C

~~★~~ 6) Explain the structure of C with an example

7) Write a C program to perform arithmetic operation.

8) Explain the files used in C program.

~~★~~ 9) Explain the following

i) Keyword ii) Identifier iii) comments
iv) Data types v) constants

10) Explain how compilation & execution of C programming is done

11) Explain input & output statements in C with syntax and example.
Module-2

1) List ^{all} the operators used in C. Explain the all the operators in C with an example.

2) Briefly explain type conversion & type casting.

3) Explain the ^{all} conditional branching statements with syntax & example [if, if else, if else if, switch]

4) Explain the iterative statements with syntax & example [while, do while, for]

5) Explain the following
i) Break statement ii) continue
iii) goto statement

6) diff b/w while & do while.

Module-3

1) Define function. Give the declaration of function (or) How do you declare the function with syntax & example.

2) Explain Parameter passing to the function i) call by value ii) call by reference.

3) Explain

- i) Function definition
- ii) Function call

4) Explain recursive function with example.

5) Explain the types of recursion

6) Explain the following with example

- i) Scope of variable
- ii) Storage classes
- iii) written statement

7) Programs under recursion

- i) Factorial
- ii) Fibonacci series
- iii) tower of hanoi
- iv) GCD

8) Arrays

i) Define array & How do you declare & initialization array elements explain with syntax & example

9) Explain one dimensional array for inter-function communication.

10) Explain operations that can be performed on arrays.

11) Explain syntax & example the declaration & initialization of two dimensional array

12) Explain operations that can be performed on 2 dimensional array

Module-4

- 1) Define String & explain the function used for reading & writing the strings.
- 2) Explain string Taxonomy with diagram
- 3) Write a C programming for the following string operations with in build ~~and~~ without inbuild functions
 - i) String length
 - ii) String concat
 - iii) String compare
 - iv) String append
 - v) String reverse
- 4) Explain character manipulation function with example.
- 5) Pointers
 - i) Define Pointers Give the declaration of Pointers with example
- 6) Explain the following with ex:-
 - (a) Null Pointers
 - (b) Generic Pointers
- 7) Explain how arguments ^{are} passed to the function using Pointers.

Module - 5

- 1) Define Structure. Give the declaration of structure & initialization of structure.
- 2) Explain the following
 - i) Type def
 - ii) Nested structure
 - iii) arrays of structure
- 3) Explain ^{3 ways} how the function can access members of structure.
- 4) Define union, Give the declaration & initialization of union with syntax & example.
- 5) ~~How the union c.~~ Justify how the union can be useful when declared inside the structure.
- 6) Give the declaration & initialization of enum data type.
- 7) Explain input & output operation on enum ^{3 standard}
- 8) What is file & explain then streams in C.
- 9) Explain the types of file (2 types)
- 10) Explain the steps for using files in C

- 11) explain the file modes in C
- 12) explain the functions used to read data from file
- 13) explain the functions used to write data from file with prototype & example
- 14) explain the following
 - i) End of file [EOF]
 - ii) Close a file

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