PT2 Question BANK

Programming in C PRC238912 2ⁿᵈ SEM DIV B (TERM Jan2025-MAY2025)

Unit 4 Functions CO4

1)Write the syntax and example of function with no arguments and no return values with diagram (4mks)

2) Write the syntax and example of functions with arguments and no return values with diagram (4mks)

3) Write the syntax and example of functions with arguments and one return value with diagram (4mks)

4) Write the syntax and example of functions with no arguments and one return value with diagram (4mks)

5) Define recursion Write any 2 advantages of recursion (4mks)

6)Write a program in C to calculate the sum of numbers from 1 to n using recursion. (4mks)

7)Write a program in C to print the Fibonacci Series using recursion. (4mks)

8) Write a program in C to find the Factorial of a number using recursion (4mks)

9)WAP to check whether the given number is a perfect number using function with return type

and argument (4mks)

10)WAP to calculate simple interest SI=PNR/100 using function without return type and having arguments (4mks)

11)WAP to find HCF and LCM of 2 numbers using function with return type and having argument (4mks)

12)Define nesting of functions? WAP to calculate the average marks of 5 students using nesting of functions (Hint: average calls sum) (4mks)

13) Define global variables and local variables WAP to demonstrate the difference between global variables and local variables. (4mks)

14)WAP to check whether the given number is a strong number using function without return type and having arguments (4mks)

15)WAP to print square root of a number using function with return type and arguments (4mks)

Unit 5 Arrays and string CO5

Array

17) Explain compile time initialization of an array with code snippet (4mks)

18) Write the syntax of two dimensional array declaration compile time initialization with code snippet (4mks)

19) Write a program in C to sort the numbers in Ascending /Descending order using Array. (4-6mks)

8)WAP to perform matrix addition $\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ $\begin{bmatrix} 5 & 6 \\ 7 & 8 \end{bmatrix}$

20) (4-6mks)

21) WAP to search for an element in an array (run time initialization of array reqd) (4-6mks)

22)WAP to find the sum and average of 5 item prices in a bill using run time initialization of array

(4-6mks)

23)WAP to print the maximum and minimum of n array elements using compile time initialization of array (4-6mks)

24)Distinguish between one dimensional array and two dimensional array based on any 4 parameters (4mks)

25)Define array? Enlist any 4 advantages of array (4mks)

String

26)Explain strcat(),strcpy(),strlen() strcmp() function with syntax ,function and code snippet (6-8mks)

27)Write a program in C to Find the frequency of a character in a string. (4-6mks)

28) Write a program in C to Find the number of vowels, consonants, digits and white

Spaces in a given string (4-6mks)

29) Write a program in C to check whether a given string is palindrome or not. (4-6mks)

30) Write a program in C to count the total number of words in a string. (4-6mks)

Unt6 Pointers and Structure CO6

Structure

31) Define Structure Write the syntax of Structure declaration. (4mks)

Distinguish between array and structure based on parameters

Distinguish between structure and union based on parameters (4mks)

32) Define nested structure classify its types with code snippet(separate structure ,Embedded structure) (4mks)

33) Create structure "Employee" with data members Ename, Eid, Esalary. Write a program to scan data for an employee and print the employee details. (6-8mks)

34)a) Create structure "book" with data members bname, bauthor, bpubyear,bnopages,bISBNNO,bprice. Write a program to scan data for 3 books and print the data. (use concept of array of structure). (6-8mks)

b)Create structure "Student" with data members Sname, Sub1mks, Sub2mks, Sub3mks,totmks. Write a program to compile time initialize data for 3 students and print the details of student with highest and lowest tital marks. (use concept of array of structure). (6-8mks)

35) Create a structure "person" with 3 members pname,pid,paddress .Read the person details and print the person details by passing structure as an argument to function (6-8mks)

Pointer

36)Define pointer with an example code snippet 4mks

37) Explain Arrays of pointer with example program 4mk

38) a) Write a program in C to find the maximum number between two numbers using a

pointer. 4mks

b) WAP using pointers to compute the sum of all elements stored in an array 4mks

39) Write a program in C to swap two numbers using Call by value and call by reference 4-6mks

40) Define the following terms in pointer concept: a) Reference operator b)Dereference operator
4mks