ASSIGNMENT 4

1. What are the different types of functions available in C? what do you mean by pass by value and pass by reference. (2+3)
2. Difference between iteration and recursive function? Give example. (5)
3. What is function with its syntax. Explain actual and formal parameter with example. (2+3)
4. What is the method of declaring local and global variables with example? (4)
5. What is a recursive function? Write a program in C to allow a user to enter an integer number interactively and display its factorial value. (1+4)
6. What is the difference between function declaration and function definition? WAP to swap the value of two variable using pass by value and pass by reference. (2+4)
7. Difference between the methods of passing argument to function with example. What are advantage and disadvantage. (6)
8. WAP to convert a decimal number into binary using function. (6)
9. Explain the significance of user defined functions with example. (5)
10. WAP to check a given number is Armstrong or not using recursive function. (5)
11. What is an array? What are the advantages of using array? (2+2)
12. Write a program to convert a lowercase character string into uppercase using array. (4)
13. Write a program that read a 3*3 matrix and find sum of all the elements of matrix then print the sum. (6)
14. Write short note on String handling functions. (6)
15. WAP to input two matrices of size m X n and p X q resp. pass these matrices to a function to calculate the product of matrix. Display the product in the main() function. (8)
16. How do you initialize 2D array? Explain with example. (4)
17. WAP to calculate the length of string without using string handling function. (4)
18. WAP to check a string is palindrome or not without using string handling function. (5)
19. WAP to read a string and rewrite its character in alphabetical order. (4)
20. What are structures? How and when the they declared in C-program? (4)
21. WAP having a structure of student type. Make use of array of structure to input information of 20 students. (5)
22. How structure members are accessed using pointer. Distinguish between Structure and union. (2+4)

23. WAP to read the name, roll no and marks of five students using array of structure object. Display the name and roll no of those student's mark is greater than 50. (6)
24. Write a program to read five different names, roll, address, percentage using array of structure and display name who has score the 3rd highest. (5)
25. Create a user defined array structure student record having member's physics, chemistry and mathematics. Feed the marks obtained by three students in each subject and calculate the total of each student. (6)
26. Explain nested structure with example. (4)
27. WAP to add two distances given in feet and inch format using structure. (6)
28. Create a structure named student that has name, roll and marks as member. Assume appropriate types and size of member. Use structure to read and display record of 10 student. Create two functions: one is to read information of student and other to display the information. (6)
29. Why should we prefer structure over array? What is the principal difference between structure and array? (2+2)
30. Explain about "Array within structure" along with programming example. (4)