



**4. Attempt any ONE part of the following:****10x1 = 10**

Q.No	Question	Marks	CO
a.	What is recursion? Write a C program to calculate the factorial of a given no. entered by user through keyboard.	10	2
b.	What is function declaration? What are the places in a program where a function declaration can be done? Is prototype declaration essential? Give reason	10	2

**5. Attempt any ONE part of the following:****10x1 = 10**

Q.No	Question	Marks	CO
a.	(i) What are the benefits of using pointers in C programming language? (ii) What are the different rules to be followed when performing operations on pointer variables.	5 5	3
b.	What do you mean by pointer expression, chain pointer and void pointer? Explain each term with suitable example.	10	3

**6. Attempt any ONE part of the following:****10x1 = 10**

Q.No	Question	Marks	CO
a.	WAP to enter full name and date of birth of person and display it through Union.	10	4
b.	Write a programme to store 50 player's details such as player name, country name, and batting average. Display the details of the players who are playing for country.	10	4

**7. Attempt any ONE part of the following:****10x1 = 10**

Q.No	Question	Marks	CO
a.	A file named DATA contains a series of integer numbers, Write a program to read these numbers and then write all 'odd' numbers to a file to be called ODD and all 'even' numbers to a file to be called E\VEN:	10	5
b.	What do you mean by command line argument in file handling using C. Explain with an example?	10	5