PPS CIE 2 Question Bank

1. Why are functions needed?
2. Differentiate actual parameters with formal parameters.
3. Define recursive function with an example.
4. Define structure. How do you access structure member / elements?
5. Write a recursive program to find the GCD of two numbers.
6. Write a function to find the sum of digits of a given number.
7. Write a program to implement binary search.
8. Explain how arrays are passed to a function with an example.
9. How do you define a structure within a structure? Explain with an example.
10. How is a structure data type different from an array? Explain with an example.
11. Write a program that uses a function to search a number within an array.
12. What is the purpose of main() in C? Is it pre-defined or user defined function. Justify it with proper example.
13. Write a program to check the occurrence of an element in the list.
14. Explain selection sort with an example.
15. Write a function to swap two values.
16. Write program to sort n elements using bubble sort
17. What are the advantages of functions?
18. Differentiate between recursion and iteration
19. Recursive programs to implement
    - Factorial
    - x^n
    - linear search
    - binary search
    - Fibonacci series up to given limit
20. Why do string subscripts end with NULL character? Explain it with an example.
21. All string handling functions without using built-in functions – strlen(), strrev(), strcpy(), strcmp(), strcat(), ...etc
22. Write a program to check if a given string is palindrome or not.
23. Explain rray of structures with an example program.
24. Explain arrays with in structures with an example.

25. What are different types of parameter passing techniques explain them.
26. How are members of structures passed as arguments to functions?
27. Explain bit-fields concept.
28. How are unions different from structures.
29. 2D array programs
    - Matrix Addition
    - Matrix Multiplication
    - Symmetric Matrix
    - Det of 2*2 matrix
    - Identity Matrix

30. Program to read and display elements of a multi-dimensional array.
31. What is function prototype? How is it different from function definition.