



OR

14. a) Distinguish between Linear and Non Linear data structures with examples? 5M  
b) Compare and contrast array of pointer and pointer to arrays. 5M

15. What is null pointer? What is a void pointer? Explain when null pointer and void pointer are used with a suitable example for each? 10M

OR

16. Write a 'C' program using functions that reads an array of integers and reverses the elements of an array using pointers? 10M

17. With the help of syntax and example program explain the various string handling functions? 10M

18. Write a program to define a structure for hotel that has members - name, address, grade, number of rooms and room charges. Write a function to print the names of a hotel in a particular grade. Also write a function to print names of a hotel that have room charges less than the specified value. 10M

19. a) Discuss in detail about the file positions functions. 5M  
b) Distinguish between r, r+ and w, w+ modes of files. 5M

OR

20. Write a 'C' program to count the number of words, white spaces and tab spaces present. 10M