IEC College of Engineering and Technology, Greater Noida
DEPARTMENT OF APPLIED SCIENCE
SECTION-B

Assignment Unit 4

Submission Date- 01-07-2022

Notes-Attempt any 10 questions.

1. Write the importance of sorting in problem solving. Write a program in C using bubble sort technique to sort 10 numbers entered by the user.
2. Explain the importance of structure in C programming. Write a program in C using structure to enter and print the record of 10 books available in your library. Following fields may be included in the record: -book_title, book_price and number_of_pages.
3. Explain the significance of null character in string.
4. Differentiate linear and binary search.
5. Explain the Selection sort with example.
6. Write a program two find out the odd and even number from the array elements and its count.
7. Write the advantage of using array. Write the program for matrix multiplication of two matrix elements.
8. Difference between structure and union.
9. Define Sorting Algorithm with an example.
10. Create a suitable structure in C language for keeping the records of the employees of an organization about their code, Name, Designation, Salary, Department, City of posting. Also write a program in C to enter the records of 100 employees and display the name of those who earn more than 20,000.
11. What do you mean by sorting? Write a program in C to sort 'n' positive integers using bubble sort. Also draw the flowchart for the same.
12. Write an algorithm to find the second largest element in an array.
13. What do you mean by pointer arithmetic?
14. What do you mean by order of complexity? Explain various notions to represent order of complexity with diagram.
15. Write short notes on following.1.Enumerated Data Type   2.String

16. Explain Selection sort technique for sorting problem. Also write an algorithm for selection sort. Sort the following numbers using selection sort technique.
26,54,93,17,77,31,44,55,20
17. Explain linear search and binary search technique for searching an item in a given array. Also write the complexity for each searching technique.