1. What is networks?

Ans. Networks may be defined as connection of distantly separated systems.

1. Difference between calloc and malloc?

Ans. Calloc—takes 2 arguments (no. of bytes,no. of elements)

Initializes the value to 0

Malloc—takes 1 argument,(no. of bytes)

Allocates single block of memory and returns a pointer to its first byte

1. What are the advantages of using pointers

Ans. Pointers help to directly access memory blocks.

* Accessing array elements

**•**  Passing arguments to a function when the function needs to modify the original argument

**•**  Passing arrays and strings to functions

**•**  Obtaining memory from the system

**•**  Creating data structures such as linked lists and binary trees

• What is the difference between White box testing and Black box testing?

In black box testing only the initial and final states are known. Intermediate stages are not known.

• What is Ip address?

An IP address is a 32-bit address, which gives the address of a system on network. It is dynamic and can change each time a network is set up.

IP address is divided in to 4 classes.

Class A: starts with 0 (0-127)

Class B: starts with 10(128-)

Class C:starts with 110

Class D: starts with 1110 ---multicast

Class E: starts with 11110----reserved for future use

Difference between Arrays and Linked List?

Array is a collection of same data types together. It’s any element can be accessed using index.

Linked list is also a collection of same data types together but access can’t be done using index.

Array is contiguous set of memory location whereas memory for linked list can be allotted anywhere in free space, thus proves to be better in dynamic programming.

• What are pointers in c?

Pointers in C are a way to access memory locations, change value of variable outside its scope, passing arrays and string to functions and returning them from function and to implement DS like LL and BTs.

• What is data warehousing?

Data warehousing may be defined as storing crude data, i.e. maintaining a database without refinement and correction.

• What is Recursion Function?

A recursion function can be defined as a function which calls itself. It is a powerful way to write strong functions.

• What is TDM?  
• What are the types of Networks?

The two different types of network are:

Subnet: A connectionless network in which when a message enters , all its packet don’t follow the same path. The paths are not predefined.

Virtual Circuit network: A connection oriented network in which each packet of a message follows a predefined path. Before a packet enters, a network path is established.

• Difference beyween callby value and callby reference?

Call by value—passes the value of the variable in a function

Call by reference—passes the address of the variable in the function

• What is the difference between Ram and Rom?

RAM: It is random access Memory,volatile, allows R/W right,

ROM: Read Only Memory, non-volatile, allows only Read right

• What is polymorphism?

• What are the layers of OSI Model?

The different layers of OSI model are:

Physical Layer🡪Data link layer🡪Network Layer🡪Transport Layer🡪Session Layer🡪Presentation Layer🡪Application Layer

• Difference between TCP and UDP?

TCP-🡪connection oriented, reliable, allows flow control, error control, congestion control

UDP🡪 connection less, unreliable, doesn’t allow flow control, error control or congestion control, no guarantee for timing of delivery. Eg. WiFi

• What is Function Overloading?

Function overloading may be defined as passing the same variable with different data types, which calls different functions depending on the datatype of parameters passed.

• What is Inheritance?

Inheritance may be defined as ‘has a’ relationship. The class receives all the properties of its previous class in inheritance.

• What is the difference between C and C++?

• What is the difference between array and pointer?

Array is a collection of elements.

Pointer is an indicator or the address of the value to which it points.

• What is normalisation?and their types?

Normalisation may be defined as removing redundancy and inconsistency from the database. It is of types:

1NF: here the primary key

2NF:

3NF:

BCNF:

• What is the difference between Char and Varchar in DBMS?

Char allows only character whereas varchar allows both number and character.

• What is OS?

OS is Operating system, which controls various functions of the system. It controls system calls, function calls, scheduling algorithms and others such that a system runs well.

• What is a tree?

A tree is a DS which graphically looks like a real tree with root at the top. It is a better way of storing data, because it takes less time to search and insert values. Its complexity is less.

• What is a linked list?

A linked list is a DS which allows dynamic memory allocation. It can’t be accessed using index.

• What is a struct?

A struct is also a DS with difference from other DS that it can store multiple data types. It defines a data type one of its kind. The data type created may contain elements of non data type also