COMPUTER NETWORK ORAL QUESTIONS:-

Q1) what is computer network?

Ans.A group of Interconnected nodes between computing devices that can exchange data and share resources with each other.

-connection established using cable or wireless media.

Q2. Which devices are used in CN?

Ans.Repeater,Hub,Bridge,Switch,Routers,Gateway,Brouter,NIC

Q3.what is purpose of CN?

Ans. To allow devices within the network to transmit ,exchange or otherwise share information and resources with one another.

-cost efficiency

-remote access

Q4.Types of nw

Ans.LAN-local area nw

WAN-wide area nw

PAN-personal area nw

MAN-metropolitian nw

SAN-storage area nw

CAN-campus area nw

Q5.Uses of LAN, MAN, WAN

Ans. LAN:

It usually connects small group of computers in a given geographical area.

It is very easy to design .

It is used in schools colleges hospitals,offices.

High internet speed

MAN:

it is an wider nw that covers large area like towns cities.

They are both public and private.

It is difficult to design.

WAN:

it has to capacity to connect various countries together.

Very difficult to design.

Low Internet speed.

Q6.Physical transmission media

Ans.the transmission path over which a signal propagates.

Q7.what is nw topology and its types

Ans. The structure of the nw of how all the components are interconnected to each other

There are two types:

1.physical topology

2.logiccal topology

Q8.which are the logical topology?

Ans.Star, bus topology,ring,mesh,hybrid,Tree,Hybrid

Q9.explain nw layers and their uses

Ans.1.Physical :

Actual hardware sits at this layer.it transmits signals over media.

2.Data link:

Translates binary into signals and allows upper layer to access media

3.Network:

Its responsible for packet forwarding.routing,addressing

4.Transport:

Data tranfers between system and hosts,including error checking and data recover.

5.Session:

It determines which packets belongs to which text and image file.

6.Presentation:

Converts data from application layer.

This allows the different layer to understand each other.

7.Application:

Most of the user actually interacts with at this layer.

Q10. What is use of OSI layer and its benefits

Ans.used to describe the functions of networking system.

It standardizes the function of a telecommunication into seven layers.

Each layer serves a specific purpose and facilities communication between different devices and systems.

Benefits:

1.The osi model is a valuable educational tool for teaching and understanding network concept.

2.Its 7 layers are independent.

3.It offers high security and flexibility.

4. It can handle connectionless services.

Q11.TCP/IP model and uses

Ans.

1.Physical : responsible for generating the data and requesting connections.

2.Data link layer: Error prevention and framing are also provided by the data link layer.

3.Internet layer: this layer parralles the functions of OSI nw layers.It defines the protocols which are responsible for the logical transmission of data.

4.Transport : It exchange the data receipt.end to end communication is reffered .

5.Application : it provides applications with standardized data exchange.Its protocols include HTTP,FTP.

Q12. What is data link layer

Ans.It is the 2nd layer of the 7 layer osi model or compter networking.It transmits data between nodes on a network segment across te physical layer.

Q13.what is the framing

Ans.It is the process of dividing digital data into small parts or frames to be sent across a network.

Q14.what is the error detection layer

Ans.When data is transmitted from one device to another device the system does not guarentee whether the data received by the devices is identical to the data transmitted by another device.

Error detection is possible in any layer.

Q15.what is the types of error

Ans.

1.singlebit error

2.multiple bit error

3.burst error

Q16.what is protocol

Ans.protocol is a set of rules for formatting and processing data.Network protocol is common language for computers

Q17.What is types of sliding window protocol

Ans.It has two tyoes mainly:

1.Go- back -N ARQ

2.Selective Repeat ARQ

Q18.explain Static and dynamic channel allocation

Ans.

1.Static: fixed no of channels are allocated to cells.

-If all the channels are occupied and user make a call then the call will be blocked in FCA

-In FCA no such complex algorithms are used.

2.dynamic:fixed no of channels are not allocated to cells.

-frequency reuse is not

- Strategy is costly

-performs better

Q19.Types of Ip

Ans.1.Public

2.Private

3.static

4.dynamic

Q20.What is IPv4 and IPv6

Ans.Internet protocol version 4 is the 4th version of the internet protocol.

It is a 32 bit no that uniquely interface on a machine.

The address is written in decimal digits

Q21.What is routing

Ans. Routing is the process of selecting a path for traffic in a network.Roying selects the path for internet protocol packets to travel from their origin to their destination.

Q22.what is types of routing?

Ans.

1.Static routing: it means we have to manually add routs to the routing table.

2.Default routing: this is method where the router is configured to send all packets toward a single router

3.Dynamic routing: It is easy to configure.