

## Questions on OSI Model with answers-

### **Q1- What does the acronym OSI stand for?**

Ans- Open System Interconnection. The OSI reference model is used as a guide for teaching and understanding the way networks operate.

### **Q2- What are the layers of the OSI model?**

Ans- Application, Presentation, Session, Transport, Network, Data Link, Physical. An easy way to remember the order of the layers is: **A-ll P-eople S-ee T-o N-eed D-ata P-rocessing** .

### **Q3- At which layer of the OSI model is a path decision made based upon an IP address?**

Ans- Network. At the network layer, data is transported in the form of a packet.

### **Q4- Which of the following takes place at the presentation layer?**

Ans- Encryption. The presentation layer encrypts data to be sent across the network, and decrypts it so that it can be accessed by the application layer on the receiving end.

### **Q5- Which is NOT a function of the Application layer?**

Ans- Windowing. Quality of Service and user authentication are also handled by the application layer.

### **Q6- Which layer of the OSI model contains the LLC sub layer and the MAC sub layer?**

Ans- Data Link Layer. The LLC and MAC sub layers allow for different layer 2 protocols to be used, such as Ethernet, Token Ring and FDDI.

### **Q7- How can data be transported in different layers?**

Ans- Data is transported in bits at the Physical layer. A bit is simply a binary digit. Either a 0 or a 1. Data is transported in segments at the Data Link layer. At the data link layer, user data is encapsulated in a frame.

### **Q8- What is the function of Network Layer?**

Ans- The network layer establishes the route between the sender and receiver across switching points, which are typically routers. The most ubiquitous example of this layer is the IP protocol in TCP/IP. IPX, SNA and AppleTalk are other examples of routable protocols, which mean that they include a network address and a station address in their addressing system. This layer is also the switching function of the dial-up telephone system. If all stations are contained within a single network segment, then the routing capability in this layer is not required.

### **Q9- The link for a switch connection is isolated from other data traffic except for what type of messages?**

Ans- Following are the types of messages-

- i. Multicast Messages – Message are sent to a specific group of hosts on the network.
- ii. Broadcast Messages – Message is sent to all devices connected to the LAN.

### **Q10- Why are the layers of the OSI model important to the network administrator?**

Ans- The Layers of OSI Model are important for the network administrator in the following manner-

- i. To troubleshoot network problems by verifying functionality of each layer.
- ii. In many cases it requires the network administrator to isolate at what layer the network problem occurs.