

## Question 1

### Explain OSI Model

The model is made of a number of layers that make up the OSI model in the sending of information to different hosts. This model is the most famous but its not really popular and used as TCP/IP is used more and has less layers.

The layer that comes first is the physical layer that is mainly made of the different physical components of the model such as different wire like fibre or copper, or the equipment being used.

The next layer is the Data Link layer that's responsible for the local network host delivery and can allow multiple computers to send information over the same network.

The layer Network Layer is responsible for the routing of the information such as it being sent from the host source to the destination and every hop it needs to pick up the right next hop when delivering the information.

The Transport layer is responsible for delivery of the information to the end host in the right order and the correct information.

The Session Layer is responsible for the establishing the connection and management of the connection.

The Presentation Layer is responsible for the encryption and formatting

The layer Application takes care of Data Generation and consumption.

## Question 2

### Explain the TCP/IP Model

The TCP/IP model is made of a number of layers.

These are:

1. Network Layer routes packets from the host sending to the host that is receiving. These contain the actual data being sent and the ip addresses of the sender and the receiver. It passes a datagram through a number

of routers between the source and destination. The internets have protocols that determine the route the datagrams may take.

2. Application Layer is where the network applications and their protocols are. These include HTTP, FTP, DNS. An application layer protocol is distributed over a number of end systems with the application in one using the protocol to exchange packet of information with the application in another end system.
3. Transport Layer transports application layer messages between the application end points