**Chapter 1**

**q1:data communication**-is the exchange of data between two devices via some form of transmission medium such as a wire cable.

**Q2:data:** Refers to information presented in whatever from is agreed upon by the parties creating using it.

**Q3: simplex:** the communication is unidirectional, as on a one-way street.

Q4: **half duplex:** each station can both transmit and receive but not at same time.

**Q5: full duplex:** both stations can transmit and receive simultaneously.

**Q6:network:**is the interconnection of a set of devices capable of communication.

**Q7: transmit time** is the amount of time required for a message to travel from one device to another.

**Q8: response time** is the elapsed time between an inquiry and a response.

**Q9: reliability is** measured by the frequency of failure, the time it takes a link to recover from a failure and the networks robustness in a catastrophe.

**Q10: topology** refers to the way in which a network is laid out physically.

**Q11: mesh topology:** every device has a dedicated point to point link to every other device.

**Q12: star topology:** each device has a dedicated point to point link only to a central controller usually called hub.

**Q13: bus topology:** it is a multipoint.one long cable acts as a backbone to link all the devices in a network.

**Q14: Ring topology:** a signal is passed along the ring in one direction from device to device until it reaches its destination.

**Q15: LAN:** is usually privately owned and connects some hosts in a single office building and campus.