The least signiﬁcant bit of the ﬁrst byte deﬁnes the type of address. If the bit is 0, the address is unicast; otherwise, it is multicast.

The broadcast destination address is a special case of the multicast address in which all bits are 1s.

In the full-duplex mode of Gigabit Ethernet, there is no collision; the maximum length of the cable is determined by the signal attenuation in the cable

The CTS frame in CSMA/CA handshake can prevent collision from a hidden station.

DSL is an asymmetric communication technology designed for residential users; it is not suitable for businesses

A cell network uses the cell as the basic unit of data exchange. A cell is deﬁned as a small, ﬁxed-size block of information.

A virtual connection is deﬁned by a pair of numbers: the VPI and the VCI.

The IP protocol uses the AAL5 sublayer.

A repeater forwards every bit; it has no ﬁltering capability.

A bridge has a table used in ﬁltering decisions.

A bridge does not change the physical (MAC) addresses in a frame.

A router is a three-layer (physical, data link, and network) device.

A repeater or a bridge connects segments of a LAN. A router connects independent LANs or WANs to create an internetwork (internet).

A router changes the physical addresses in a packet