

Midterm #1 -- closed book section

The entire exam is to be turned in at 10:40AM. Work the closed book section first and turn it in before you consult your books and notes to work on the open book section. For the closed book section, write your answers on the exam itself.

There are fifteen questions. Each is worth three points. Choose the most appropriate phrase for terminating each sentence. Circle your choice.

A null modem is used to connect
 A: two ethernet segments.
 B: a computer and terminal.
 C: a computer to a nearby modem.
 D: computers with dial-up telephone lines.

The twisted pair found in homes is usually used for
 A: telephone lines.
 B: electrical power.
 C: cable television service.
 D: hair curling irons.

In networking, parity is used to
 A: prevent errors.
 B: detect errors.
 C: balance errors.
 D: correct errors.

In a circuit-switched network, messages are transmitted
 A: over coax cable..
 B: through offices maintained by the telephone company.
 C: in short packets.
 D: over allocated channel.

Multiplexing allows
 A: modems to directly connect to the telephone system.
 B: several ``conversations'' to travel on one wire.
 C: a computer to connect to several networks.
 D: coax cable to be twisted.

Computer applications on different machines communicate over connections maintained by
 A: the data link layer.
 B: the presentation layer.
 C: the session layer.
 D: the application layer.

In data communications, 10 Mbps means
 A: 10,000 bits per second.
 B: 10,000 bytes per second.
 C: 10,000,000 bits per second.
 D: 10,000,000 bytes per second.

The lowest layer of the OSI reference model is
 A: the applications layer.
 B: the data link layer.
 C: the physical layer.
 D: the session layer.

Optical fiber is made from
 A: glass.
 B: either glass or plastic.
 C: fused silica.
 D: transparent nylon.

Flow control is used to
 A: prevent transmitters from sending data too fast.
 B: route data through a packet-switched network.
 C: determine if a packet was corrupted in transmission.
 D: regulate the transmission of data between public data networks.

The data link layer of the OSI reference model connects the
 A: session and transport layers.
 B: circuit and packet layers.
 C: physical and network layers.
 D: Ethernet and token ring layers.

The smallest physical transmission medium in use at UNCA is
 A: twisted pair.
 B: RS-232.
 C: optical fiber.
 D: thin wire coax.

In multi-mode optical fiber, light rays are reflected at the interface between
 A: the core and the cladding.
 B: the cladding and the jacket.
 C: the core and the jacket.
 D: the cladding and the mirror.

In RS-232, a modem is a
 A: DTE, *i.e.*, data terminal equipment.
 B: DCE, *i.e.*, data circuit-terminating equipment.
 C: DTE, *i.e.*, data terminating equipment.
 D: DCE, *i.e.*, data computer equipment.

In a piggyback scheme, a single frame usually carries both
 A: data and acknowledgment.
 B: data and sequence number.
 C: data and sliding window.
 D: data and bacon bits.