

TEST #3
SOUTHERN METHODIST UNIVERSITY — EE 8301
NATIONAL TECHNOLOGICAL UNIVERSITY — ST 750-N
April 21, 1999

CERTIFICATION OF TESTING ENVIRONMENT (To be signed after taking test):

ALL STUDENTS:

I understand that this test is intended to be taken in a 55-minute period without my prior knowledge as to content and without collaboration with other persons. On my honor, I testify that I have taken it within that context and that I will not discuss its contents with anyone other than the instructor and other students who have already taken it.

Signed _____
(Must be signed by student to be counted)

FOR OFF-CAMPUS SITES ONLY:

I distributed and collected these test materials on a 55-minute interval on
_____ **(date).**

Signed _____
(Must be signed by site coordinator to be counted)

Name _____

Location _____

SOUTHERN METHODIST UNIVERSITY — EE 8301
NATIONAL TECHNOLOGICAL UNIVERSITY — ST750-N
TEST #3 — CLOSED BOOK, CLOSED NOTES*
April 21, 1999

Instructions: The "Location" (above) is where you want your graded test returned. For off-campus sites, your home address is recommended. *For multiple-choice questions, circle the letter in front of the one-best answer. The CERTIFICATION OF TESTING ENVIRONMENT on page 1 must be signed to be counted.

The answers to the next several questions may be found in the answer pool below. Find the word or phrase that is the one-best answer to the question, and place the letter or symbol next to that answer in the blank. You should not need to use a pool answer more than once. Each question is worth 2%.

A 4	P Deterministic	CC IEEE 802.1	PP Router
B LAPD	Q Ethernet	DD 1	QQ Flags
C D Channel	R Multiplexer jitter	EE IEEE 802.5	RR IP header
D PC	S B channel	FF Terminal	SS L field
E Datagram	T TCP	GG Constant length	TT Non-deterministic
F Bit stuffing	U Aloha	HH Transparency	UU 2
G Responses	V Bridge	JJ 4	WW FDDI
H 8	W Q.931	KK IEEE 802.4	XX Concentrator
J I.430	X CLNP	LL Multiplexer	YY MAC header
K UDP	Y LLC trailer	MM FRAD	ZZ Splicer
L IEEE 802.9a	Z E channel	NN Multipoint repeater	
M 126	AA Repeater		
N IEEE 802.2	BB CSMA/CD		

1. ___ The actual name of IEEE 802.3
2. ___ Another name for I.451
3. ___ Method for achieving transparency in LLC sublayer
4. ___ Combines some of the features of ISDN with those of a LAN
5. ___ Similar to IEEE 802.5
6. ___ Achieves the effect of a multipoint medium using point-to-point technology

7. ___ Achieves the use of a point-to-point protocol using a multipoint medium
8. ___ LLC Sublayer
9. ___ This is used to resolve collisions in the ISDN Basic Rate D channel
10. ___ In the most common implementation of this standard, each terminal requires a modem
11. ___ This standard features the specification of a "passive bus."
12. ___ This contains a hardware-determined DA and SA
13. ___ Connectionless protocols are sometimes used to eliminate this
14. ___ This standard provides for a "reservation and priority" scheme
15. ___ Used by LAPD to achieve delimiting (framing)
16. ___ Number of ISDN Basic Rate frames needed in Layer 1 to make one octet in LAPD
17. ___ This contains a software-determined DA and SA
18. ___ A Layer 4 connectionless protocol
19. ___ A characteristic of Ethernet
20. ___ A packet that travels independently of others in a network
21. ___ A computer that gets its instruction from IP protocol
22. ___ The maximum number of terminals that normally should be operated on an ISDN passive bus

Multiple-Choice Questions; each worth 4%:

23. The lowest category of UTP wiring that would be used with Fast Ethernet would be
 - a. Cat 4.
 - b. Cat 5.
 - c. Cat 6.
 - d. Cat 7.
 - e. none of the above
24. The purpose of the Call Reference Flag in ISDN command packets is to
 - a. help resolve glare in ISDN access lines and access trunks.
 - b. help resolve collisions in ISDN access lines and trunks.
 - c. help a terminal remember which calls are in progress.
 - d. help delimit (frame) the D-channel commands.
 - e. none of the above
25. An IEEE 802.5 subnetwork uses:
 - a. a cable in the shape of a ring.
 - b. a physical bus in the shape of a ring.
 - c. a logical bus in the shape of a ring.
 - d. a virtual bus in the shape of a ring.
 - e. none of the above

26. The Perfect Scheduling Algorithm is used to arbitrate between terminals sharing the same _____ channel in a _____- rate access structure. (Which pair of items best fits in the blanks?)
- B, Basic
 - B, Primary
 - H, Primary
 - D, Basic
 - D, Primary
27. Which types of devices can be at the end of a catalink?
- bridges and routers
 - terminals and repeaters
 - bridges and repeaters
 - terminals and bridges
 - terminals and routers
28. ISDNNT1 devices can handle protocols in Layer ____; NT2 devices can handle protocols in layer ____ and below.
- 1, 2
 - 2, 3
 - 3, 1
 - 3, 2
 - 1, 3
29. The DA in this OSI layer specifies an end system.
- Layer 4
 - Layer 3
 - Layer 2
 - Layer 1
 - None of the above.
30. Most of the LANs in existence today use
- wideband.
 - narrowband.
 - carrierband.
 - broadband.
 - baseband.
31. The MAC frame's "pad" field is for
- equal transmission opportunity for terminals.
 - error control.
 - collision detection.
 - bit synchronization.
 - congestion control.

32. Which of the following is NOT part of the TCP/IP "Protocol Suite"?
- a. Ethernet
 - b. FTP
 - c. TELNET
 - d. ICMP
 - e. UDP
33. A hub in a 10-Base-T LAN is basically a
- a. bridge.
 - b. multiplexer.
 - c. router.
 - d. repeater.
 - e. none of the above
34. A phrase that best describes a datagram network is
- a. broadcast networking.
 - b. connectionless packet switching.
 - c. non-autonomous route selection.
 - d. source-based routing.
 - e. none of the above
35. Which of the following is true?
- a. Both TCP and IP are connectionless.
 - b. Both TCP and IP are connection-oriented.
 - c. TCP is connectionless; IP is connection-oriented.
 - d. TCP is connection-oriented; IP is connectionless.
 - e. none of the above.
36. In 30 words or less, explain why terminals sending LAPB, LAPD, and frame relay could all use the same USRT chip.
