FINAL EXAMINATION
SOUTHERN METHODIST UNIVERSITY -- EETS 7315
Spring, 2011

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STUDENT -- READ CAREFULLY BEFORE SIGNING:

CERTIFICATION OF TESTING ENVIRONMENT (To be signed <u>after</u> taking test):

ALL STUDENTS:

I am familiar with the Honor Code of Southern Methodist University. I am also aware that different students take this test at different times. I have not received information about the contents of this test and I will not give information about its contents to others. I will not cheat and I will not tolerate those who cheat.

Agreed and Signed_____
(Must be signed by student to be counted)

FOR OFF-CAMPUS SITES ONLY:

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

Signed_____
(Must be signed by site coordinator to be counted)

Name_____

Student I.D. __ __ __ __ __ __ __ __

SOUTHERN METHODIST UNIVERSITY -- EETS 7315
FINAL EXAM -- CLOSED BOOK, CLOSED NOTES
Spring, 2011

Instructions: Three 3" by 5" note cards are allowed. NO OTHER MATERIALS, DEVICES OR BACKPACKS ARE ALLOWED. Graded Final Exams are not returned. You may learn your course grade by going to http://access.smu.edu. Campus students' grades should be posted on Access by no later than May 9. Other off-campus students' grades will posted by section as they become available. Graduation candidates are handled separately. If you want to get details on your individual test grades, send a self-addressed stamped envelope to the Instructor. No grade information will be given by e-mail or telephone.

Read the 50 statements below. If a statement is completely true, circle "T" in front of the statement; otherwise circle "F." 25 statements are true. The CERTIFICATION OF TESTING ENVIRONMENT on page 1 must be signed to be counted.

T F 1. According to OSI encapsulation, (Data-Link PDU) - (Network PDU) = Data-Link PCI.

T F 2. Extranets are sometimes called VPNs (Virtual Private Networks.)

T F 3. The only fields in HDLC that are subject to zero insertion are Address, Control, and Information.

T F 4. In a serial interface specification, the Logical Specification refers to an explanation of what the pins (circuits) do; i.e., what is their function.

T F 5. A balanced voltage interface always has an average (d-c) voltage of 0 between the wires.

T F 6. The clock source for Isochronous timing is the network terminators (modems).

T F 7. HDLC does not allow Information-Transfer frames in responses.

T F 8. One unshielded twisted copper pair is normally used as the access structure to the ISDN switch for basic-rate ISDN access.

T F 9. In a UN Class HDLC system, there are 2 or more TEs on the link, a primary and one or more secondaries. The secondaries cannot receive data until they are first polled.

T F 10. The ITU is part of the IETF.

T F 11. In a given network system, you can have IP without TCP, but you can't have TCP without IP.

T F 12. A receiving start-stop terminal in a rest state synchronizes by looking for a transition from 1 to 0 while sampling at 4 times the rated bit rate.

T F 13. BGP is used within a network; OSPF is used between networks in the Internet.

T F 14. Multiple (contiguous) binary ones in a data circuit generally indicate a defective circuit.

T F 15. A repeater is a layer two relay.

T F 16. A data communications system using a connectionless protocol in Layer 4 must use connectionless protocols in layers 5-7.

T F 17. Transit delay is a much better indicator of communication system performance than network latency.

T F 18. ATM and cell switching generally mean the same thing.

T F 19. Industry forums, such as the SIP Forum, are primarily for the purpose of marketing that technology.

T F 20. The format of the HDLC "C" field determines whether a frame is a command or a response.

T F 21. Frame Relay is classed as a private network because it is not available from public carriers.

T F 22. The feedback tap positions for computing a CRC using hardware are determined by the coefficients of a "Message Polynomial."

T F 23. The only way to guarantee that a "pure" frame relay network will not discard a frame is not to send the frame.

T F 24. The long-term average information transfer rate in any data system is called "CIR."

T F 25. The typical maximum data throughput in an Ethernet without LAN Switching is about 30% of the bit rate.

T F 26. A Layer 3 PDU in a connectionless protocol is called a "datagram."

T F 27. "Pure" Frame Relay doesn't provide the option of automatically retransmitting errored frames.

T F 28. IPv6 provides four times as many possible addresses as IPv4..

T F 29. In disconnecting, a USB connector should break the power connection before breaking the data connection.

T F 30. The main reason why ATM is a poor choice of technologies to the desktop PC is efficiency.

T F 31. When tunneling, detunneling comes before decapsulation.

T F 32. The key to the success of IEEE 802.11 systems is Spread Spectrum technology.

T F 33. Voice over IP today is a convenient, reliable, inexpensive alternative to the Public Switched Telephone Network.

T F 34. Virtual calls can be connected and disconnected using primitives.

T F 35. An eye pattern graphs voltage versus current.

T F 36. Pulses in the ISDN Basic Rate Passive Bus always alternate polarity.

T F 37. WiMAX stands for "Worldwide interoperability for Microwave Access."

T F 38. Ethernet I and II today are normally operated connectionless.

T F 39. UDP is a Layer 4 connection-oriented protocol.

T F 40. IEEE 802.3 networks are non-deterministic.

T F 41. Both bridges and repeaters can be end-points in a network..

T F 42. The DA in OSI Layer 3 specifies an end system.

T F 43. Ethernet technology was developed by IBM.

T F 44. 4G wireless systems were defined by the 4G Partnership Project.

T F 45. Ethernet is the world's most popular type of "wired" LAN.

T F 46. The purpose of the "Pad" field in an IEEE 802.3 MAC frame is to help ensure collision detection.

T F 47. The TCP/IP Protocol Suite is older than the OSI Reference Model.

T F 48. Technically speaking, the terms "Reliable Service" and "Connection Oriented Protocol" both imply accountability.

T F 49. The "Identification" and "Fragmentation Offset" fields in the IP header are used to put the datagram fragments back together.

T F 50. The "Protocol" field in an IPv4 datagram is used to point to the application (logical port) to be used.