EC 511 – Fall 2003
George Mason University

Assignment 6

Student Name: __________________________________________________

Mark your answer below and return **only** this answer sheet:

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1. ____________ networks form the core of the telecommunications structures today.
   a) ATM
   b) frame relay
   c) local area
   d) metropolitan area
   e) wide area

2. The first technology infrastructure that connected organizations for conducting business transactions electronically was ____________.
   a) ATM
   b) EDI
   c) frame relay
   d) wide area networks
   e) metropolitan area networks

3. EDI is the precursor of what is now termed ____________ electronic commerce.
   a) B2C
   b) C2C
   c) B2B
   d) G2C
   e) G2G

4. In North American, the ______________ standard is used to conduct most EDI transactions.
   a) ANSI ASC X12
   b) X.25
   c) EDIFACT
   d) VAN
   e) XML

5. Necessary components that are required for EDI include
   a) special software.
   b) a telecommunications network.
   c) a legal agreement.
   d) A and B
   e) A, B, and C

6. Wide area networks provided by common carriers or information systems providers that supply not only the underlying wide area network, but also additional services is called a(n) ____________.
   a) VPN
   b) extranet
   c) EDIFACT network
   d) VAN
   e) X.25
7. Based on business estimates, a paper-based transaction requires as much as ________ times the resources required by an electronic transaction.
   a) 3
   b) 5
   c) 10
   d) 15
   e) 20

8. The disadvantages of EDI includes
   a) lack of adequate network infrastructure.
   b) its cost of implementation.
   c) poor security.
   d) inflexibility
   e) interoperability issues.
   f) A, B, and C
   g) B, D, and E
   i) B, C, and D

9. __________ is beginning to replace EDI over private business-to-business networks.
   a) ANSI ASC X12
   b) X.25
   c) EDIFACT
   d) VAN
   e) XML

10. One of the major disadvantages of XML is the necessary
    a) the non-optional tags that are required.
    b) agreement of all parties regarding naming coding scheme.
    c) level of nesting of tags.
    d) specialization of XML programmers.
    e) specialized software for testing.

11. Most companies rely on renting, subscribing, or leasing ____________ services from a telecommunications company or specialized information systems provider.
    a) personal area network
    b) metropolitan area network
    c) local area network
    d) wide area network
    e) intranet

12. All wide area networks fall into one of two broad categories, ___________ and __________ networks.
    a) dedicated circuit, switched
    b) circuit-switched, packet-switched
    c) analog, digital
    d) dedicated circuit, virtual circuit
    e) permanent circuit, virtual circuit
13. A company that frequently has a constant flow of transactions might benefit from a ______________ type of wide area network that provides permanent connections between two locations.
   a) virtual circuit
   b) permanent circuit
   c) dedicated circuit
   d) packet-switched
   e) circuit switched

14. ________ circuits are the slowest and most prone to transmission errors.
   a) analog
   b) digital
   c) leased
   d) permanent
   e) virtual

15. The highest speed digital lines that exist today in the United States are ___________ circuits.
   a) T1
   b) T3
   c) T4
   d) SONET
   e) Fractional T1

16. The capability of including several communication channels on one medium is called
   a) switching
   b) duplexing
   c) multiplexing
   d) splitting
   e) broadcasting

17. __________ multiplexes 24 channels of 65Kbps on each channel.
   a) T1
   b) T3
   c) T4
   d) SONET
   e) Fractional T1

18. A connection over a public network that a company uses for internal purposes is a ____________.
   a) VPN
   b) extranet
   c) EDIFACT network
   d) VAN
   e) intranet
19. A widely-accepted modern technology developed by telecommunications companies to provide a high-speed digital link over existing twisted pair cables is ____________.
   a) SDH
   b) ISDN
   c) DSL
   d) DirectWay
   e) cable modem

20. The most common DSL used by home users is ____________ DSL in which there are different upstream and downstream transmission rates.
   a) asynchronous
   b) synchronous
   c) symmetric
   d) asymmetric
   e) rate adaptive

21. Digital subscriber lines are targeted toward _________ users.
   a) small business
   b) medium to large business
   c) novice
   d) cable modem
   e) Internet

22. Common packet-switched networks commercially available to companies for electronic business or other telecommunications applications include
   a) SDH
   b) ISDN
   c) DSL
   d) ATM
   e) frame relay
   f) B and C
   g) D and E

23. The range of transmission speeds available for frame relay is approximately ____________.
   a) 64 Kbps to 1.5 Mbps
   b) 56 Kbps to 25 Mbps
   c) 56 Kbps to 45 Mbps
   d) 2.5 Mbps to 2.5 Gbps
   e) 25 Mbps to 2.5 Gbps