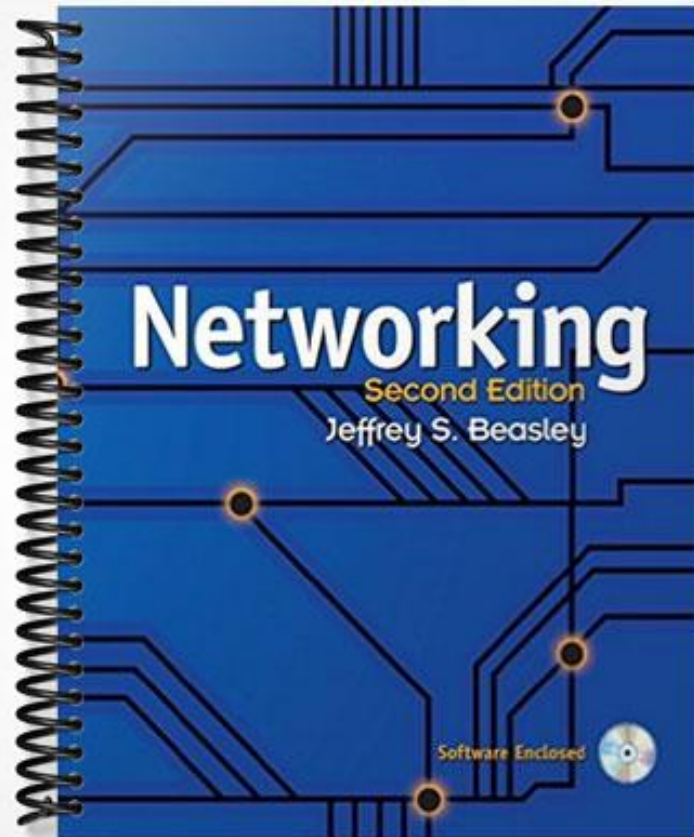


**TEST BANK**



Name \_\_\_\_\_

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

1) In regards to CAT5e / CAT6 cable operating at half-duplex mode for Ethernet or FastEthernet, pins 1/2 3/6 are used to carry the data. 1) \_\_\_\_\_

2) A CAT5e / 6 link test, tests from one termination to another. 2) \_\_\_\_\_

3) The six subsystems of a structured cabling system are the following: 3) \_\_\_\_\_

- |                   |                           |
|-------------------|---------------------------|
| Building Entrance | Equipment Room            |
| Backbone Cabling  | Telecommunications Closet |
| Vertical Cabling  | Work Area                 |

4) The following is the color map and pin numbers for T568A: 4) \_\_\_\_\_

1. White-Green
2. Blue
3. White-Orange
4. Green
5. White-Blue
6. Orange
7. White-Brown
8. Brown

5) The following is the color map and pin numbers for T568B: 5) \_\_\_\_\_

1. White-Orange
2. Orange
3. White-Green
4. Blue
5. White-Blue
6. Green
7. White-Brown
8. Brown

6) A full channel test tests all the link elements from the computer through patch panel to the wall plate. 6) \_\_\_\_\_

7) NEXT stands for Near End Cross Talk and a low db value is desirable. 7) \_\_\_\_\_

8) A NEXT measurement of 59.5 dB is made on wire pairs 1-2/3-6. A NEXT measurement of 51.8 dB is made on wire pairs 3-6/7-8. Pairs 3-6/7-8 have the best NEXT performance measurement. 8) \_\_\_\_\_

9) Only two wire-pairs are used to obtain a proper Power Sum measurement. 9) \_\_\_\_\_

10) Signals travel in a cable at some percentage of the velocity of light. The term for this is called the nominal velocity of propagation. 10) \_\_\_\_\_

11) The T568A wire order is used with the EIA/TIA 568A standard while the T568B wire order is used with the EIA/TIA 568B standard. 11) \_\_\_\_\_

12) Delay skew is critical because if the wire lengths of different wire pairs are significantly different, the data will arrive at the receiver at a different time potentially creating distortion of the data. 12) \_\_\_\_\_

13) Patch cables are too short to be tested. 13) \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

14) Which does permanent networking cabling within a building belong to? 14) \_\_\_\_\_

- A) Vertical Cabling
- B) Work Area
- C) Equipment Room
- D) none of the above

15) What is the overall length limitation of an individual cable run from the telecommunications closet to a networking device in the work area? 15) \_\_\_\_\_

- A) 10 meters
- B) 100 meters
- C) 10k meters
- D) 100 k meters

16) What is the data rate for Ethernet? 16) \_\_\_\_\_

- A) 10 Mbps
- B) 100 Mbps
- C) 1000 Mbps
- D) 10 kbps
- E) none of the above

17) How many wires are in a CAT5e/6 twisted-pair cable? 17) \_\_\_\_\_

- A) 12 wires
- B) 8 wires
- C) 4 wires
- D) 6 wires

18) How many pins does an RJ-45 modular plug have? 18) \_\_\_\_\_

- A) 4
- B) 6
- C) 8
- D) 16
- E) none of the above

19) horizontal cabling 19) \_\_\_\_\_

- A) is cabling that extends out from the telecommunications closet into the LAN work area.
- B) is cabling that extends out from the work area into the LAN.
- C) is cabling that extends out from the backbone into the LAN work area.
- D) is cabling that extends out from the equipment room into the LAN work area.
- E) none of the above

20) The basic blocks of horizontal cabling consist of: (select two) 20) \_\_\_\_\_

- A) switch or hub
- B) routers
- C) backbone cabling
- D) patch panel

21) A UTP Certification report lists the following. 21) \_\_\_\_\_

Length	12	36	45	78
	285	288	284	283

Select the correct answer.

- A) The test must be repeated.
- B) Insufficient information to obtain an answer.
- C) The cable length is too long.
- D) The cable passes the length test.

22) What type of cable is currently recommended for LAN work areas. 22) \_\_\_\_\_

- A) shielded twisted pair
- B) CAT6 shielded twisted pair
- C) CAT 5e UTP
- D) CAT6 UTP
- E) CAT7 UTP

23) What is the benefit of shielded twisted pair cable? 23) \_\_\_\_\_

- A) ease of installation
- B) excellent EMI protection
- C) less expensive
- D) preferred by industry for all installations
- E) none of the above

24) A UTP Certification report lists the following. 24) \_\_\_\_\_

Length	12	36	45	78
	! 310	308	! 311	307

Select the correct answer.

- A) The cable fails the certification test.
- B) Pairs 36 78 will be certified.
- C) Pairs 12 45 will be certified.
- D) The cable has passed the certification test.
- E) The ! sign indicates the cable pair meets or exceeds Power Sum test criteria.

25) The length difference in wire pairs for UTP 25) \_\_\_\_\_

- A) indicate the cable should not be certified.
- B) indicate the cable should be certified.
- C) are due to the difference in the cable twists for each wire pair.
- D) are due to poorly manufactured cable.

26) The nominal velocity of propagation for UTP 26) \_\_\_\_\_

- A) should be close to 1
- B) should be close to 100m
- C) speed of light
- D) .should be some percentage of the speed of light.

27) The proper alignment of the transmit and receive pairs in a CAT5/5e/6 UTP cable requires 27) \_\_\_\_\_

- A) the transmit (+) and (-) signals connect to the receivers (+) and (-) signals respectively.
- B) the transmit (+) and (-) signals connect to the receivers (-) and (+) signals respectively.
- C) the transmit (-) and (+) signals connect to the receivers (-) and (+) signals respectively.
- D) none of the above

28) In the balanced mode of operation for UTP 28) \_\_\_\_\_

- A) the (+) side connects to ground.
- B) the (-) side connects to ground
- C) neither wire in the wire pairs connects to ground.
- D) is only used with STP cable installations.
- E) is only used in high EMI environments.

29) CAT 6 UTP is recommended for use in (select all that apply) 29) \_\_\_\_\_

- A) the campus network backbone cabling
- B) only the equipment room
- C) the horizontal cabling for a LAN
- D) is not recommended in LANs
- E) the work area

30) A data problem is reported to the network administrator. The problem is found to be with the UTP network connection. What steps could the network administrator have done to isolate the problem. (Select all correct answers.) 30) \_\_\_\_\_

- A) Visually inspect all UTP terminations.
- B) Run a cable test using a device similar to the Omnichecker.
- C) Use the ping command to verify network connectivity.
- D) Use pairs 4/5 7/8 to repair the connection.
- E) Contact the installer of the UTP cable to obtain a certification report.

31) Match the definition to the correct term. 31) \_\_\_\_\_  
Interconnected LANs within a limited geographic area.

- A) Campus Network
- B) Wide Area Network
- C) Metropolitan Area Network
- D) none of the above

32) Match the definition to the correct term. 32) \_\_\_\_\_  
An Ethernet system operating at 100 Mbps.

- A) AUI Ethernet
- B) Link Ethernet
- C) Gigabit Ethernet
- D) Fast Ethernet
- E) none of the above

33) Match the definition to the correct term. 33) \_\_\_\_\_  
Another term for network congestion.

- A) bottled
- B) bottlenecking
- C) constricted
- D) constricting
- E) none of the above

34) Match the definition to the correct term. 34) \_\_\_\_\_  
Describes where the cable connects to a jack or a patch panel.

- A) TCO
- B) closet
- C) termination
- D) none of the above

- 35) Match the definition to the correct term. 35) \_\_\_\_\_  
A graphical or text description of the wire connections from pin to pin.  
A) Color-map  
B) Continuity map  
C) Wire-map  
D) Connectivity map  
E) none of the above
- 36) Match the definition to the correct term. 36) \_\_\_\_\_  
Consists of all the link elements from the wall plate to the switch.  
A) Complete Link  
B) Full Channel  
C) Full Link  
D) link  
E) none of the above
- 37) The main cross-connect (MC) connects to 37) \_\_\_\_\_  
A) Telco  
B) ISP  
C) floor distributors  
D) work station outlet
- 38) Another name for an RJ45 connector is 38) \_\_\_\_\_  
A) 8C8P  
B) 8W8T  
C) 8P8C  
D) 8P8T
- 39) The term for unwanted signal coupling from 39) \_\_\_\_\_  
one permanent link to another is called  
A) near-end crosstalk  
B) Alien Crosstalk  
C) far-end crosstalk  
D) none of the above
- 40) 10GBase-T requires the use of \_\_\_\_\_ in the transmission of data 40) \_\_\_\_\_  
over UTP  
A) the high data lines  
B) pins 4/5 7/8 only  
C) all four wire pairs  
D) 10G is not possible at 10G

- 1) TRUE
- 2) FALSE
- 3) FALSE
- 4) FALSE
- 5) TRUE
- 6) FALSE
- 7) FALSE
- 8) FALSE
- 9) FALSE
- 10) TRUE
- 11) FALSE
- 12) TRUE
- 13) FALSE
- 14) D
- 15) B
- 16) A
- 17) B
- 18) C
- 19) A
- 20) A, D
- 21) D
- 22) D
- 23) B
- 24) A
- 25) C
- 26) D
- 27) B
- 28) C
- 29) C, E
- 30) B, C
- 31) A
- 32) D
- 33) B
- 34) C
- 35) C
- 36) B
- 37) A, B
- 38) C
- 39) No Correct Answer Was Provided.
- 40) C