

FUNDAMENTALS OF VOICE & DATA CABLING

CHAPTER 11 STUDY GUIDE

1. What is a service loop?

coil of cable used to take up slack

2. How much cable should be left outside of a wall plate before terminating it? Where should the first label be placed on it? How much unjacketed cable is allowed at the termination block?

6 inches for label, 6 inch left outside, stripped about 8-7 cm
1/2 inch

3. What is meant by dressing the cable?

bundled and secured to racks in an orderly manner
velcro, binds it to something

4. What are the two most common ways of dressing cables? Which one is considered a better way to dress cables?

velcro - can be undone, better way
nylon - sticks ties

5. What are the two types of splices used in copper voice cabling?

straight splice & butt splice

6. What tool can be used to trace cables that haven't been labeled?

tone & probe

7. What are D-rings and what are they used for?

used to route the bundle of cable to their points of termination
part of cable management system

8. What are mushrooms and what are they used for?

used to route cable, ball on a stick that cables can wrap around

9. What is a MUTO? Where would you find it in a structured cabling system? How many users can be connected into one MUTO?

multi-user telecom outlet, placed in office layout, serves between six & 12 users
cabling

10. What is raceway? How does it differ from guttering? Where would you usually find raceway in a structured cabling system?

protects cabling & for aesthetic reasons.

where the walls are not able to be fished

covered cable management

guttering is like a ladder rack

11. What is a cable tray? Where would you usually find it in a structured cabling system?

used to provide a pathway and support for data cables & backbone cables on TR

holds cables in TR

12. What is a ladder rack? Where would you usually find it in a structured cabling system?

built from sections that resemble a ladder.

holds cables and tie down

in TR only

13. What are J-hooks and bridle rings? Where would you usually find them in a structured cabling system?

used to support cables when raceways, ladders, cable trays, or wire walls are not available.

bridle ring - J - holds cable together

sufficiently out of sight

14. What is the maximum distance you should allow between cable supports so that the cable doesn't droop too much and cause possible changes in the twist geometry of the wires in the cable? 1.5 meters

15. Why do we call pairs of wire "tip and ring"?

derived from the old switchboard originally used for telephone calls

16. What are the ring colors of modern day telecommunications cable? List a mnemonic to remember this. *blue, orange, green, brown, and slate*

17. What are the tip colors of modern day telecommunications cable? List a mnemonic to remember this. *white, red, black, yellow, & violet*

18. When are binders used in 25-pair cabling? How many wires are in each binder? What are binders called that contain multiple binders?

each binder has 25 pairs, each binder has a color code according to more than 25 pairs, use binders, super-binders

beyond 2400, a different color code is used

19. List the correct order of Cat 5e cable coloring scheme.

~~568A~~ *568A - g/w, g, o/w, blue, blue/w, o, br/w, br*

~~568B~~ *568B - o/w, o, g/w, blue, blue/w, g, br/w, br*

blue/w, blue, orange/w, orange, green/w, green, brown/w, brown

20. What is the difference between the 568A and 568B wiring schemes? Which cabling standard is normally used by U.S. businesses?

1, 2, 3, & 6 are different

21. List the correct wiring scheme for a Cat 5e cable using:

| 568B | 568A |
|-------------|-------------|
| <i>o/w</i> | <i>g/w</i> |
| <i>o</i> | <i>g</i> |
| <i>g/w</i> | <i>o/w</i> |
| <i>bl</i> | <i>bl</i> |
| <i>bl/w</i> | <i>bl/w</i> |
| <i>g</i> | <i>o</i> |
| <i>br/w</i> | <i>br/w</i> |
| <i>br</i> | <i>br</i> |

22. What are RJ-48 jacks used for?

used for T1 circuits, different from RJ-45

23. What type of network is STP normally used on? Does STP use an RJ-45 jack?

shielded twisted pair, STP doesn't have to use RJ-45, as long as it's shielded

24. What are the two most common types of coaxial connectors? Which one is used primarily for video? BNC & F connectors

F-connector used in video applications

25. Name 4 types of common terminations of communication cables. Briefly describe each one.

110 block

66 block

BTX - has IDC in it

chore block - mainly used in Europe

need different punchdown tools

26. What type of tool is normally used to terminate wires on a 110 block?

punch or wire punchdown

27. What are D-connectors? Where would you normally find one in a network?

serial connectors

28. What type of fiber cable normally has a jacket color of orange? Of yellow?

orange - multimode

yellow - single mode

29. What is the main difference between an ST and an SC connector?

ST - bayonet

SC - cubic only in

30. What are other types of fiber connection?

FC - looks like bayonet, but threaded

MTRJ -

LC - small SC

- MTP - multiple termination point

31. What are the two ways to splice fiber cable? Briefly describe each one.

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32. What is meant by the term "cross connecting"?

interconnects two networks