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FUNDAMENTALS OF VOICE & DATA CABLING
CHAPTER 6 STUDY GUIDE

1. What do we mean by structured cable systems (SCS) and what do they provide for?

    SCS - integrated cable plans developed by specific companies

    Standardized media & layout
    connection interfaces
    uniform design
    compatibility
    open architecture
    decreased maintenance cost
    training

2. What three things should you make sure you're in compliance with when designing or updating a network?

    Standards

3. Who were two of the companies who originally started created standards for the cabling industry? AT&T, IBM

4. What is the order that codes take precedence?

    local → state → national → international

5. What organization developed the 802 standards?

    IEEE

6. Fill in the table below:

Number	Standards for:
802.1	standards
802.2	LLC
802.3a	CSMA/CD
802.3	ethernet
802.5	Token ring
802.8	fiber
802.10	LAN MAN security
802.11	wireless LAN
802.11b	WIFI

7. What does it mean when there's a letter after an 802 standard number?

further adding standards

8. Describe the various parts and what they mean in the following wire standard:
   10Base5

   10 = bandwidth
   Base = baseband
   5 = type of cable

9. Identify what type of cable is described by the following wiring standards and what kind of network it's used in:

physical/logical

Wiring Standard	Cable type/description	Used in this type of network normally
10Base2	coaxial	bus / bus
10Base5	coaxial	bus / bus
10BaseT	twisted pair - uses 2 pairs	star / bus
100BaseTX	UTP - uses 2 pair	star / bus
100BaseFX	fiber - 2 fiber	full duplex

10. What type of medium does FDDI networks use? Token Ring?

fiber, coaxial

11/What are the two types of logical topologies? Identify which physical topologies normally use which logical topologies.

logical – bus + ring

star uses bus

ring uses ring

12. Who accredits TIA and EIA to develop industry standards for telecommunication equipment, cabling, etc.?

ANSI

13. Briefly describe what each of the following standards cover:

Standard	Description
TIA/EIA 568-A	Commercial Building Standard for Telecom Wiring
TIA/EAI 568-B	Cabling Standards
TIA/EIA 569-A	Commercial Building Standard for Telecom Pathways & Spaces
TIA/EIA 570 -A	Residential + Light Commercial Telecom Wiring Standard
TIA/EIA 606	Administration Standard for the Telecom Infrastructure for Commercial Building
TIA/EIA 607	Commercial Building Grounding + Bonding Requirements for Telecom

14. What is ANSI?

15. What is ISO?

International Organization for Standardization

16. What is the OSI model? Who developed it?

ISO developed it

17. Identify the following organizations:

Organization	Name
ECA	electronic components, assemblies + materials association
CEA	consumer electronics association
GEIA	governmental electronics + information technology
JEDEC	joint electron device engineering council
NEMA	national electrical manufactures association
IEC	
UL	
OSHA	
NEC	
NFPA	
CEC	
CSA	
JISC	
JSA	
ACA	
ACIF	
NECA	
SA	
EC	
CENELEC	

18. What is the main difference between Cat 5 and Cat 6 cable?

6 is better rated to transmit more efficiently

19. What does SSTP and PiMF stand for? What category of cable do we associate with these terms?