**DV162\_23\_PAS\_Network Cables**

**Possible Answer Sheet**

Q1. What type of cable is commonly used for ethernet networks?

Ans: Twisted Pair of Copper Cabling called Twisted Pair Cable.

Q2. What does an ethernet cable look like inside?

Ans: An Ethernet cable resembles a traditional phone cable but is larger and has more wires and There are twisted pairs (Usually Four Pairs) of copper wires inside.

Q3. What is the purpose of twisting the wires in a pair?

Ans: Twisting the wires in pairs helps to cancel out interference.

Q4. What is the purpose of having two cables?

Ans: Purpose of having two cables in a twisted pair is for data transmitting and receiving.

Q5. Why are the four pairs of wires different?

Ans. To identify the interference ethernet wire has four pairs of wires, if there is interference to the cable when data is moving in it, all four of these pairs have different signals on the other end because they all have different twist rates.

Q6. What is twisted pair cabling?

Ans: Twisted pair cabling consists of pairs of insulated copper wires twisted together.

Q7. : How many different types of twisted pair cabling are there?

Ans: There are two main types of twisted pair cabling:  
 1. UTP (Unshielded Twisted Pair)  
 2. STP (Shielded Twisted Pair)

Q8. What do we refer to the different types of twisted pair cables as?

Ans: We refer to the different types of twisted pair cables as Categories Cables.

Q9. What is 1000BASE-T?

Ans: 1000BASE-T is a 1 gigabit per second ethernet standard that operates on twisted pair copper cabling.

Q10. : What is the maximum distance of 1000BASE-T?

Ans: 100 meters.

Q11. What type of cable is used for 1000BASE-T?

Ans: Category 5 enhanced or CAT-5e

Q12. What is 10GBASE-T?

Ans: 10GBASE-T is a 10 gigabit per second ethernet standard that operates on twisted pair copper cabling.

Q13. What does the "E" stand for in Category 5e?

Ans: “E” used for enhanced.

Q14. What type of cabling is available to purchase today?

Ans: Category 5e or CAT-5e

Q15. What type of cabling is commonly used in existing network infrastructures?

Ans: Category 5 or CAT-5

Q16. What type of cabling does 1000BASE-T support?

Ans: It supports minimum category 5 cabling.

Q17. Is there an augmented version of category 6?

Ans: Yes, which is called Category 6A.

Q18. What type of cable is commonly used with cable modem networks?

Ans: Coaxial Cable.

Q19. What is the conductor of a coaxial cable?

Ans: The conductor is the central core of coaxial cable and is usually made of copper.

Q20. What is the most commonly used type of coax cable?

Ans: RG6 as the type of coax cable.

Q21. What is the construction of a coax cable?

Ans: Coax Cables are made of Central conductor of copper, dielectric insulator around central conductor, Outer Conductor (Shield) and Outer Jacket (Sheath) made of PVC , PE, or some type of plastic.

Q22. What is the plenum?

Ans: A plenum refers to a designated space that serves as a pathway for air circulation.

Q23. What is the purpose of the plenum?

Ans: The purpose of plenum is to give pathway for air circulation to the building or house and to give space for installation of cabling.

Q24. What type of cable should be used in a shared plenum area?

Ans: We should use a special type of network cable that is commonly made of a low smoke version of PVC which contains FEP(Fluorinated Ethylene Polymer ).

Q25. What is the jacket of an ethernet cable typically made of?

Ans: PVC (Polyvinyl Chloride)

Q26. What type of cable is usually used for cable runs?

Ans: STP (Shielded Twisted Pair) cable

Q27. What is STP?

Ans: STP is Shielded Twisted Pair cable used for cable run mostly burial.

Q28. What type of writing is found on the outside of an ethernet cable?

Ans: Abbreviated writing is found on the outside of an ethernet cable that describe what type of cable is onside. Such as U for Unshielded, TP for twisted pair, S for shielded, F for Foil Shielding.

Q29. What do the abbreviations stand for?

Ans: UTP: Unshielded Twisted Pair  
 STP: Shielded Twisted Pair  
 Cat5: Category 5 (a cable standard)

Cat5e: Category 5 enhanced (an improved version of Cat5)

Cat6: Category 6 (another cable standard)

Cat6a: Category 6 augmented (an enhanced version of Cat6)  
CM: Non-plenum cable rating

CMP: Plenum cable rating

PVC: Polyvinyl Chloride   
FTP: Foil Twisted Pair

Q30. What does S/FTP stand for?

Ans: This abbreviation is written on cable that Stands for Shielded Foil Twisted Pair, as foil shielding means each twisted pair is wrapped in a separate foil.

Q31. What does F/UTP stand for?

Ans: Foiled Untwisted Pair.

Q32. What type of cable is used for direct burial?

Ans: STP (Shielded Twisted Pair)

Q33. What is used to waterproof the cables?

Ans: To keep away water from twisted Pairs inside the cable.

Q34. What purpose does the shielding serve?

Ans: The purpose of shielding serves is to reduce or eliminate interference.