**CompTIA A+**

To watch the below video, you need to right click on the Hyperlink just below the highlighted task in red color and select the Open Hyperlink option. It will take you to the YouTube where you can watch the concerned video.

You are required to watch the video and answer the Questions asked below.

You need to type answers in the row indicated with “Ans.”

**What are the network cables and connectors?**

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| Network cables and connectors  <https://drive.google.com/file/d/14GSkAJacs-pw2bREiPKoUUmTwY1AC0LN/view?usp=sharing> | |
| 1 | What is the central piece of fiber? |
| Ans. | What is central core of fiber?  The core is at the center of the optical fiber and provides a pathway for light to travel |
| 2 | What is the use of core? |
| Ans. | FOR LIGHT TO TRAVEL |
| 3 | What is cladding in fiber? |
| Ans. | one or more layers of materials of lower refractive index in intimate contact with a core material of higher refractive index. T |
| 4 | Can we go long distance using fiber? |
| Ans. | Fiber optic cables can transmit data across long distances without any significant loss in signal quality. |
| 5 | What are the types of fiber? |
| Ans. | There are two types of fibre optic cables – multimode and single-mode. Multimode optical fibre or OFC is capable of carrying multiple light rays (modes) at the same time as it has varying optical properties at the core. Single-mode fibre has a much smaller core size ( |
| 6 | WAN is used for? |
| Ans. | A wide-area network (WAN) is the technology that connects your offices, data centers, cloud applications, and cloud storage together. It is called a wide-area network because it spans beyond a single building or large campus to include multiple locations spread across a specific geographic area, or even the world. |
| 7 | LAN is used for? |
| Ans. | LANs are used mainly for resource sharing. Expensive hardware like laser printers and CD/ROM drives can be shared by several users when they are attached to a network. Further, purchasing a network version of software cuts the costs of purchasing them for each and every computer. |
| 8 | What do you mean by single mode fiber? |
| Ans. | A single-mode fiber is a single glass fiber strand used to transmit a single mode or ray of light. Single-mode fiber features only one transmission mode. Compared with multi-mode fiber, it can carry higher bandwidths; however, it needs to have a light source having a narrow spectral width. |
| 9 | What do you mean by multimode fiber? |
| Ans. | Multimode fiber optic cable has a large diametral core that allows multiple modes of light to propagate. |
| 10 | How far we can go using single mode fiber? |
| Ans. | Single-Mode Fibre Distance. Multimode fibre has a much shorter maximum distance than single-mode fibre, making it a good choice for premise applications. Single-mode fibre can go as far as 40 km or more without hurting the signal, making it ideal for long-haul applications. |
| 11 | How far we can go using multimode fiber? |
| Ans. | Multimode fiber will allow transmission distances of up to about 10 miles and will allow the use of relatively inexpensive fiber optic transmitters and receivers. There will be bandwidth limitations of a few hundred MHz per Km of length. Consequently, a 10 mile link will be limited to about 10 to 30 MHz. |
| 12 | WAN stands for? |
| Ans. | Wide area network |
| 13 | LAN stands for? |
| Ans. | A local area network (LAN) is a collection of devices connected together in one physical location, such as a building, office, or home. |
| 14 | What are the types of single mode fiber? |
| Ans. | As we all know, multimode fiber is usually divided into OM1, OM2, OM3, OM4 and OM5 fiber types. When it comes to single mode fiber types, it can be categorized into OS1 and OS2 fiber, which are SMF fiber specifications. |
| 15 | What are the types of Multimode fiber? |
| Ans. | As mentioned earlier, there are 5 commonly used multimode fiber types used in most industries worldwide. The most common optical multimode fiber types are OM1, OM2, OM3, OM4, and OM5. |
| 16 | How do these fiber optics cable connect to an equipment? |
| Ans. | The transceiver converts the electrical signals into light pulses. These light pulses are then sent through the fiber optic cable. The light pulses travel through the fiber cable and are converted back into electrical signals at the other end by another transceiver. |
| 17 | ST stands for? |
| Ans. | SOFT WARE TESTING |
| 18 | SC stands for? |
| Ans. | sc.exe , a "Service Control" utility for managing Microsoft Windows |
| 19 | LC stands for? |
| Ans. | LOCODE |
| 20 | What is the use of twisted pair cabling? |
| Ans. | Twisted-pair cables were among the earliest guided transmission media, along with coaxial cables. Today, twisted-pair cables are used in many applications in networking and communication, for example, in telephone lines, Digital Subscriber Line and local area networks. |
| 21 | What are the types of twisted pair? |
| Ans. | There are two main types of twisted pair cables, unshielded twisted pair (UTP), and shielded twisted pair (STP), which contains each pair of wires within an aluminium foil shield for further isolation. |
| 22 | UTP stands for? |
| Ans. | Unshielded twisted pair (UTP) is a ubiquitous type of copper cabling used in telephone wiring and local area networks (LANs). |
| 23 | STP stands for? |
| Ans. | Spanning Tree Protocol (STP) is a Layer 2 network protocol used to prevent looping within a network topology. STP was created to avoid the problems that arise when computers exchange data on a local area network (LAN) that contains |
| 24 | What do you mean by UTP? |
| Ans. | Unshielded twisted pair (UTP) is a ubiquitous type of copper cabling used in telephone wiring and local area networks (LANs). The five types of UTP cables are identified with the prefix CAT, as in category, each supporting a different amount of bandwidth. |
| 25 | What do you mean by STP? |
| Ans. | Spanning Tree Protocol (STP) is a Layer 2 network protocol used to prevent looping within a network topology. STP was created to avoid the problems that arise when computers exchange data on a local area |
| 26 | How many wires in UTP? |
| Ans. | Unshielded Twisted Pair (UTP) Ethernet CablingUTP is the most common cabling type used in computer networking. It consists of eight conductors within an outer casing. Pairs of the eight conductors are twisted around each other for crosstalk cancellation, |
| 27 | How many pair of wire in UTP? |
| Ans. | nside a UTP cable is up to four twisted pairs of copper wires enclosed in a protective plastic cover, with the greater number of pairs |
| 28 | What are the coloring pair of wire in UTP? |
| Ans. | In UTP cable, each pair is represented by a specific color. Pair 1 is Blue, Pair 2 is Orange, Pair 3 is Green, and Pair 4 is Brown. |
| 29 | What are the common standard for UTP coloring? |
| Ans. | n UTP cable, each pair is represented by a specific color. Pair 1 is Blue, Pair 2 is Orange, Pair 3 is Green, and Pair 4 is Brown. In each pair, one wire is a solid color, and the other is predominantly white with a color stripe. |
| 30 | How colors arranged in T-568A |
| Ans. | he T568A wiring standard dictates that the wires are arranged in the following order, starting with the first pin on the RJ45 jack: green/white, green, orange/white, blue, blue/white, orange, brown/white, brown. |
| 31 | How colors arranged in arranged in T-568B? |
| Ans. | 568B Wiring ConfigurationThe T568B wiring standard dictates that the wires are arranged in the following order, starting with the first pin on the RJ45 jack: orange/white, orange, green/white, blue, blue/white, green, brown/white, brow |
| 32 | What do you mean by crossover cable? |
| Ans. | A crossover cable is a special type of cable that helps connect two similar devices directly to each other, like two computers or two switches, without needing anything else in between. It's called “crossover” because the wires inside the cable cross over each other to make the connection work. |
| 33 | RJ stands for? |
| Ans. | A registered jack (RJ) is a standardized telecommunication network interface for connecting voice and data equipment to a service provided by a local exchange carrier or long distance carrier. |
| 34 | What do you mean by RJ11? |
| Ans. | registered jack 11 (RJ11) is a type of connector commonly used for telephone cables. It has four or six pins and is used to connect phones, modems, and other telecommunication devices to a wall jack or other phone line. |
| 35 | What do you mean by RJ45? |
| Ans. | Registered Jack-45. Registered Jack specifications are related to the wiring patterns of the jacks, rather than their physical characteristics. The term RJ45 has also come to refer to a range of connectors for Ethernet jacks. |
| 36 | What are the copper cable categories? |
| Ans. | CATE5 CATE 6E |
| 37 | What is splitter? |
| Ans. | to connect a central office to terminal equipment and, eventually, to end users in FTTX applications. |
| 38 | Is splitter degrade the quality of the connection? |
| Ans. | Do cable splitters degrade signal? - Quora. They certainly can. An ideal cable splitter will take whatever comes in and split the power among the output ports, with about a 10% loss. However, this is only true if all the output ports are terminated in their characteristic impedance. |
| 39 | What are the types of coaxial cable? |
| Ans. | TNC BNC **Rigid Coaxial Cable**. A **rigid coaxial cable** is comprised of two tubes of copper. Both of the copper tubes are supported at the ends of the **cable** ends and ... |
| 40 | What do you mean by RG-6? |
| Ans. | coaxial cables with an 18 AWG center conductor and 75 ohm characteristic impedance. |
| 41 | What are the types of connector type with coaxial technology? |
| Ans. | Popular Coaxial Connector TypesN, C, BNC, TNC, and other coax series have been standardized. The popular SMA started as the BRM (for Bendix Research Miniature) i |
| 42 | How far RG 6 connection can go? |
| Ans. | RG6 can go 1000FT (coaxial cable) but you will need a switch that supports it on both ends. |