Exam Code: 220-1101
Exam Name: CompTIA A+ Certification Exam Core 1

Exam A

QUESTION 1
A user working in the field reported the GPS stopped working on a phone. The user's older, in-car GPS continued to function. Later, the user reported that the phone's GPS started working again.
Which of the following MOST likely caused the phone's GPS to fail?

A. The cell phone was in conservation mode

B. The cell phone had lost service to the earner

C. The eel phone received a firmware update

D. The cell phone had overheated

Correct Answer: B
Section:
Explanation:
The phone's GPS may fail due to a loss of service from the carrier, which provides the phone with GPS location data. The fact that the in-car GPS continued to function suggests that the issue was related to the phone, not the GPS satellites. Reference: CompTIA A+ Certification Study Guide, Tenth Edition, pg. 372

QUESTION 2
A system administrator has been tasked with allowing SMTP traffic through the system's host-based firewall. Which of the following ports should the administrator enabled?

A. 23

B. 25

C. 80

D. 161

Correct Answer: B
Section:
Explanation:
SMTP (Simple Mail Transfer Protocol) uses port 25 to send email messages between servers12.SMTP uses port 25 to send email messages between mail servers. Therefore, the system administrator should enable port 25 to allow SMTP traffic through the host-based firewall. Reference: CompTIA A+ Certification Study Guide, Tenth Edition, pg. 282

QUESTION 3
A Wi-Fi mesh network has been optimized to eliminate poor coverage areas, yet users still experience decreased bandwidth and connectivity issues. Which of the following actions should the technician take NEXT?

A. Relocate any large, dense, solid, and metal objects, such as mirrors and file cabinets, in the mesh network coverage area to the perimeter so that wireless reflections, absorptions, and occlusions are minimized.

B. Use a Wi-Fi analyzer to determine whether the channel in use is overcrowded and to identify which channel the mesh network should use for best performance.

C. Use the signal strength indicator on a mobile device to roam the coverage area and generate a heat map to isolate zones with weak signals.

D. Turn off broadcasting of the SSID on the mesh network so that other networks cannot see it.

Correct Answer: B
Section:
Explanation:
If users are experiencing decreased bandwidth and connectivity issues in a Wi-Fi mesh network, the technician should use a Wi-Fi analyzer to determine whether the channel in use is overcrowded and to identify

QUESTION 4
A technician logs on to a PC and inserts an encrypted USB drive. When opening File Explorer, the technician cannot see the USB drive. Which of the following tools should the technician use to see all drives?

A. DiskPart

B. Diskmgml

C. Disk Cleanup

D. BitLocker

Correct Answer: B
Section:
Explanation:
he tool that the technician should use to see all drives is Diskmgmt. Diskmgmt is a Windows utility that allows you to manage disk drives and partitions on your computer. It can be used to view alldrives, including USB drives, that are connected to the computer12.

QUESTION 5
A computer that contains critical data has not been backed up and will not boot past a S. M.A.R. T, error that indicates imminent hard disk failure. Which of the following actions should the technician take FIRST?

A. Run diagnostics on the faulty hard drive using a boot disk

B. immediately replace the hard drive generating the SMART error

C. Turn off S. M. A. R. T, monitoring in the computer's BIOS settings

D. Attempt to boot the operating system in safe mode

Correct Answer: A
Section:
Explanation:
The technician should run diagnostics on the faulty hard drive using a boot disk first when a computer that contains critical data has not been backed up and will not boot past a S.M.A.R.T. error that indicates imminent hard disk failure.
Reference: CompTIA A+ Certification Exam Guide, Exam 220-1001, Page 376

QUESTION 6
A technician receives several error alerts on a server after an unexpected reboot. A message states that one or more disks are in a degraded state. When the technician advances to the next error message, it indicates the OS is missing.
Which of the following are the MOST likely causes of these errors? (Choose two.)

A. Missing drives in the OS

B. RAID failure

C. Bootable device not found

D. Data loss

E. Controller failure

F. CMOS corruption

G. TPM malfunction

Correct Answer: B, C

Section:
Explanation:
The message stating that one or more disks are in a degraded state is a clear indication of a RAID failure. RAID stands for Redundant Array of Independent Disks, and it is a technology used to provide fault tolerance and improve performance by combining multiple hard drives into a single logical unit.The message indicating that the OS is missing is most likely caused by a bootable device not found.This means that the server is unable to boot from the designated boot device, which could be the hard drive, a CD/DVD drive, or a USB flash drive. This could be caused by a faulty boot device, a loose cable, or a misconfiguration in the BIOS or UEFI settings.

QUESTION 7
A technician is receiving reports that the entire office sporadically loses network connectivity throughout the day. The technician determines the root cause to be EMI. Which of the following cable mediums would be the MOST cost effective without sacrificing system performance?

A. Coaxial

B. Shielded Cat 6

C. Plenum Cat 5e

D. Multimode fiber

Correct Answer: B
Section:
Explanation:
In this situation, the MOST cost-effective cable medium that would not sacrifice system performance would be B. Shielded Cat 6. Electromagnetic interference (EMI) can disrupt network connectivity by interfering with the signals transmitted over network cables. Shielded Cat 6 cables are designed to provide protection against EMI by incorporating a layer of shielding material around the cable's conductors. This shielding helps to prevent EMI from interfering with the signals transmitted over the cable.

QUESTION 8
Which of the following would be BEST reason to use a virtual machine as a sandbox?

A. To test new software in a safe environment

B. To increase the efficient use of computing resources

C. To run multiple machines on the same hardware

D. To have dedicated hardware for a single system

Correct Answer: A
Section:
Explanation:
The main reason to use a virtual machine as a sandbox is to test new software in a safe environment without risking the integrity of the host operating system. Using a virtual machine enables the testing of software and allows for the isolation of the software from the host system. Reference: CompTIA A+ Certification Study Guide, Tenth Edition, pg. 409

QUESTION 9
A user visits the desk to report that a smartphone takes more than a day to fully charge. The user has already tested multiple wall outlets and swapped the charging cable, but the results are the same. Which of the following should the technician do FIRST?

A. Verify the power rating of the charger.

B. Ensure all unnecessary connectivity features are disabled.

C. Check that all missing smartphone OS updates are applied.

D. Complete a factory reset of the phone.

Correct Answer: A
Section:
Explanation:
A smartphone that takes more than a day to fully charge may be due to a charger that is not powerfulenough. The technician should verify that the charger is rated for the smartphone's battery capacity and that it is providing the correct voltage and amperage123.

QUESTION 10
In which of the following places is a laptop's wireless antenna MOST likely located?

A. Near the network interface card
B. Underneath the battery
C. Integrated into the motherboard
D. In the bezel of the lid

Correct Answer: D
Section:
Explanation:
According to Dell Community, the Wi-Fi antenna is located in the top of the LCD display housing. It consists of two elements, fed by two cables, a white main designated on the Wi-Fi card by a white triangle, and a black auxiliary designated on the Wi-Fi card by a black triangle1.

QUESTION 11
A network administrator was notified that laptop users are unable to access or ping any network resources on the corporate network. Which of the following should the network administrator check FIRST?

A. DHCP
B. AAA
C. DNS
D. ARP

Correct Answer: C
Section:
Explanation:
Domain Name System (DNS) is an Internet service that translates domain names (e.g., its.umich.edu) into IP addresses. Dynamic Host Configuration Protocol (DHCP) is a protocol for automatically assigning IP addresses and other configurations to devices when they connect to a network.

QUESTION 12
Recently, an organization received a number of spam emails that passed through the spam gateway.
The emails contained generally the same information, but the sending domains were different. Which of the following solutions would BEST help mitigate the issue?

A. Updating the keyword filtering
B. Editing the sender policy framework
C. Contacting the gateway vendor
D. Verifying DMARC is enabled

Correct Answer: D
Section:
Explanation:

DMARC (Domain-based Message Authentication, Reporting and Conformance) is an email authentication protocol. It is designed to give email domain owners the ability to protect their domain from unauthorized use, commonly known as email spoofing.

QUESTION 13
A technician is monitoring all outbound traffic in a SOHO. Which of the following is the MOST costeffective solution to monitor the traffic?

A. Spectrum analyzer

B. Network tap

C. Lookback plug

D. Toner probe

Correct Answer: B
Section:
Explanation:
A network tap is used to intercept the signals passing over a cable and send them to a packet or protocol analyzer. Taps are either powered or unpowered:

QUESTION 14
While implementing a non-carrier-grade wireless backhaul, a technician notices the current channel selection is externally polluted with various RF signals. Upon performing a spectral analysis, the technician discovers a channel containing almost no RF pollution. Unfortunately, the technician is unable to select that channel. Which of the following is the MOST likely reason for this issue?

A. The channel is reserved for licensed band use.

B. The channel selection is defective, contact the manufacturer.

C. The channel must be unblocked by the vendor.

D. The device requires a firmware update to unlock the channel.

Correct Answer: A
Section:
Explanation:
The 2. band is subdivided into up to 14 channels, spaced at 5 MHz intervals from 2412 MHz up to 2484 MHz. Wi-Fi requires bandwidth of approximately 20 MHz, not 5 MHz. Consequently, a site designer needs to choose the channels that do not overlap. On a WLAN where only the first 11 channels are available, channels 1, 6, and 11 can be selected as non-overlapping. Note: In the Americas, regulations permit the use of channels 1-11 only, while in Europe, channels 1-13 are permitted. In Japan, all 14 channels are permitted

QUESTION 15
A user submits a help desk ticket regarding a smartphone that will no longer accept its charging cable. The assigned technician notices the phone does not have a protective case, and the user constantly transport the phone in a pocket. The technician attempts to use a secondary charger, but the cable falls out of the phone. Which of the following is the MOST likely cause of the issue?

A. The phone requires a firmware update to address charging issues.

B. The charge port contains foreign objects, such as lint.

C. The phone's battery has swelled, preventing the utilization of the charge port.

D. The phone has experienced water damage, thus the battery is not charring.

Correct Answer: B
Section:
Explanation:
The symptoms suggest that the charging cable falls out of the phone, indicating that the charge port may contain foreign objects such as lint, which can interfere with the connection between the charging cable and the phone.

QUESTION 16
A user is trying to play a DVD on a projector. The user can hear the audio; however, the projector is showing an error message that states:
HDMI Blocked due to Copy Protection Which of the following is the MOST likely cause of the error?

A. The HDMI cannot carry the signal from the DVD to the projector.

B. The user needs to switch from HDMI to a cable standard such as DisplayPort.

C. The projector does not support the necessary HDCP protocol.

D. The user needs to enable cony-protected sources in the projector's settings.

Correct Answer: C
Section:
Explanation:
The Official CompTIA® A+® Core 1 and Core 2 Student Guide (Exams 220-1001 and 220-1002) | 193 Protected content. If you encounter an error that indicates unauthorized content or an HDCP error: • DVI, HDMI, DisplayPort, and Thunderbolt all provide support for the Digital Rights Management (DRM) mechanism High-bandwidth Digital Content Protection (HDCP). HDCP allows a content source (such as a Blu-ray disc) to disable itself if the display adapter and monitor and/or speaker system do not support HDCP and fail to authenticate themselves with the playback source. There have been various iterations of HDCP (at time of writing the current version is 2.2) and backward-compatibility can be problematic as authentication may fail between devices that support different versions of the standard.

QUESTION 17
Vertical streaks are appearing on the output of a laser printer. Which of the following items is the MOST likely cause?

A. Roller

B. Drum

C. Transfer belt

D. Ribbon

Correct Answer: B
Section:
Explanation:

Vertical or horizontal lines—Marks that appear in the same place (referred to as repetitive defects) are often due to dirty feed rollers (note that there are rollers in the toner cartridge and fuser unit too) or a damaged or dirty photosensitive drum.
too) or a damaged or dirty photosensitive drum.Vertical streaks on a laser printer output are usually caused by a damaged or worn-out drum, which is responsible for transferring toner to the paper. If the drum is damaged, toner may accumulate on certain parts of the drum, leading to streaks on the printed output. Reference: CompTIA A+ Certification All-in-One Exam Guide, Tenth Edition, Chapter 15

QUESTION 18
A university student was able to boot from a live Linux CD on a computer in a shared space on campus. Which of the following will BEST prevent this type of action from occurring in the future?

A. Require TPM security features.

B. Set a boot password.

C. Disable all media options.

D. Enable secure boot.

Correct Answer: D
Section:
Explanation:
Enabling secure boot will verify the digital signature of the bootloader and operating system, ensuring that the system only boots from trusted and authorised sources. This can prevent booting from an

unauthorised live CD or other external media.The best way to prevent booting from a live Linux CD on a computer in a shared space on campus is to enable secure boot. Secure boot is a feature that ensures that the system only runs software that is signed by an authorized party. This means that the system will not boot from any unauthorized media, including live Linux CDs.Secure Boot is a feature that ensures that the system only runs software that is signed by an authorized party. This means that the system will not boot from any unauthorized media, includinglive Linux CDs. Secure Boot is an important security feature designed to prevent malicious software from loading when your PC starts up (boots)1.Booting from a live Linux CD is a process that allows you to run a Linux operating system from a CD or DVD without installing it on your hard drive. This can be useful for testing or troubleshooting purposes. To boot from a live Linux CD, you need to insert the CD or DVD into your computer'sCD/DVD drive and restart your computer. Most systems are set up to automatically boot from the CD/DVD drive, but if your system is not set up this way, you may need to change a system setting to boot from a Linux CD/DVD23.

QUESTION 19
A technician recently discovered me root cause of an application error that several users have been experiencing. The technician updated the configurations on the affected machines and verified full functionality was restored for all users, which of the following actions should the technician perform NEXT?

A.   Write a knowledge base article in the ticketing software to expedite future Incidents.

B.   Submit a bug report to the developer of the application, along with the steps taken to resolve the Issue.

C.   Work with the developer to proactively collect the application logs to identify future errors of this type.

D.   Send an email communication to the company about the issue and the steps taken to resolve it.

Correct Answer: A
Section:
Explanation:
CompTIA 6-Step Troubleshooting Process:
1. Identify the problem.
2. Establish a theory of probably cause. (Qthe obvious)
3. Test the theory to determine cause.
4. Establish a plan of action to resolve the problem and implement the solution.
5. Verify full system functionality and if applicable implement preventative measures.
6. Document findings, actions, and outcomes.
Writing a knowledge base article in the ticketing software would help document the root cause of the application error and the steps taken to resolve it, which can help other technicians resolve similar issues in the future. This is an example of knowledge management best practices. Reference: CompTIA A+ Certification All-in-One Exam Guide, Tenth Edition, Chapter 6

QUESTION 20
A thermal punier that is used 10 print order buckets in a factory has been experiencing Issues following the failure of the alt conditioner during the summer. Each ticket has blank spots or is missing text. Which of the following would MOST likely solve these Issues?

A.   Restore function to the air conditioner.

B.   Clean the heating element.

C.   Replace the paper rolls.

D.   Install new toner.

Correct Answer: A
Section:
Explanation:
it appears that option A, restoring function to the air conditioner, would most likely solve the thermal printer issue in the described scenario. The failure of the air conditioner during the summer could likely have caused high humidity or heat in the factory, which can affect the printing quality of thermal printers by causing blank spots or missing text. By restoring function to the air conditioner, the temperature and humidity in the factory can be controlled, which can help eliminate these printing issues. However, it is still possible that any of the other options listed could also potentially solve the issue, so it is best to assess the situation further and try different solutions if necessary.

QUESTION 21

A technician is troubleshooting a projector that will not display any Images. The technician has verified the computer output and cable are providing a good video signal. Which of the following should the technician do NEXT?

A. Calibrate the image.
B. Replace the bulb.
C. Test the output resolution.
D. Clean the fans.

Correct Answer: C
Section:
Explanation:
The MOST efficient next step the technician should do is to test the output resolution1. The issue of a projector that will not display any images could be related to the output resolution1. If the output resolution is not compatible with the projector, the projector will not display any images1. Calibrating the image, replacing the bulb, or cleaning the fans may not be effective1.If a projector is not displaying any images despite verifying that the computer output and cable are providing a good video signal, the technician should test the output resolution. The output resolution of the computer may not be compatible with the projector, which can cause the projector to not display any images.

QUESTION 22
A technician installed a new router at a small office. After the Installation, the technician notices that all devices have a I69.254.x.x IP address. Printers and fileshares are still working, but PCs cannot access the Internet. Which of the following should the technician configure on the router to enable devices to connect to the internet?

A. APIPA
B. DNS
C. DHCP
D. SMB

Correct Answer: C
Section:
Explanation:
o enable devices to connect to the internet after installing a new router at a small office, the technician should configure DHCP (Dynamic Host Configuration Protocol) on the router. DHCP is a network protocol that automatically assigns IP addresses and other network configuration parameters to devices on a network. By configuring DHCP on the router, the technician can ensure that all devices on the network are assigned a valid IP address that allows them to connect to the internet.If all devices have a 169.254.x.x IP address, this suggests that the router is not assigning IP addresses to the devices using DHCP (Dynamic Host Configuration Protocol). Configuring the DHCP settings on the router can enable the devices to receive IP addresses automatically and access the internet.Reference: CompTIA A+ Certification All-in-One Exam Guide, Tenth Edition, Chapter 14

QUESTION 23
A technician is installing new power supplies for the application engineering team's workstations.
The management team has not yet made a decision about installing dual graphics cards, but they want to proceed with the project anyway. Which of the following power supplies would provide the BEST solution?

A. 1000W 24-pin modular power supply
B. 220VAC 9000J surge protector
C. 500W redundant power supply
D. 2000VA uninterruptible power supply

Correct Answer: A
Section:
Explanation:

A 1000W 24-pin modular power supply provides enough power to support a dual graphics card configuration, which requires a significant amount of power. A modular power supply allows the technician to connect only the cables that are necessary for the current configuration, reducing cable clutter and improving airflow inside the case. This makes it easier to install and maintain the power supply.

QUESTION 24
The help desk received a ticket regarding Issues with a laser printer. The printer has had repairs previously for scanning Issues. Currently, the printed text is not adhering properly to the paper. Which of the following should be replaced lo resolve this Issue?

A. Fuser

B. Waste container

C. Roller

D. Toner

Correct Answer: A
Section:
Explanation:
If the printed text is not adhering properly to the paper on a laser printer that has had repairs previously for scanning issues, the fuser should be replaced to resolve this issue. The fuser is a component of the printer that uses heat and pressure to fuse the toner onto the paper. If the fuser is not functioning properly, the toner may not adhere properly to the paper.

QUESTION 25
Which of the following allows all VMs in a virtual environment to have RAM allocated for use?

A. Measured service

B. Containerization

C. Synchronization

D. Resource pooling

Correct Answer: D
Section:
Explanation:
The concept described in the Qis related to virtualization and resource management in a virtual environment. The approach that allows all virtual machines (VMs) to have memory (RAM) allocated for use is known as resource pooling. Therefore, the correct answer is D: "Resource pooling." This approach allows resources to be allocated dynamically to VMs based on their current needs, and ensures that resources are used efficiently in the virtual environment.Resource pooling is a technique used in virtualization to share resources among multiple virtual machines (VMs). With resource pooling, RAM can be allocated dynamically to VMs as needed, allowing all VMs in a virtual environment to have RAM allocated for use.Reference: https://en.wikipedia.org/wiki/Resource_pooling

QUESTION 26
A technician is replacing a computer with a connected point-of-sale system using a 9-pin serial adapter. The new computer does not have a 9-pin serial port. Which of the following ports can an adapter be installed on in order to connect to the point-of-sale system?

A. HDMI

B. Bluetooth

C. USB

D. Lightning

Correct Answer: C
Section:
Explanation:

A USB to 9-pin serial adapter can be used to connect the new computer to the point-of-sale system using a USB port. USB is a common and versatile port type found on most computers.If a technician is replacing a computer with a connected point-of-sale system using a 9-pin serial adapter and the new computer does not have a 9-pin serial port, an adapter can be installed on the USB port in order to connect to the point-of-sale system. A USB-to-serial adapter can be used to connect a serial device to a USB port on a computer.

QUESTION 27
A technician installs a new printer for a workstation and tries to print a test page, but the page does not print. The technician looks at the print queue and notices that the printer is called 'Generic Printer." Which of the following BEST describes what the technician should do to fix this issue?

A. Connect the printer with a USB cable rather than over the network.
B. Install the appropriate printer drivers for the OS.
C. Install the correct toner in the printer.
D. Set the printer trays to allow duplex printing

Correct Answer: B
Section:
Explanation:
The technician should install the appropriate printer drivers for the OS to enable the computer to communicate with the printer. The generic printer name suggests that the drivers are missing or not installed correctly.

QUESTION 28
A help desk technician has been tasked with installing an IP phone in a small office with an unmanaged switch. When connected to an RJ45 receptacle, the phone does not boot. Which of the following is the QUICKEST way to resolve this issue?

A. Upgrade the Ethernet cable to the latest specification.
B. Replace the phone.
C. Install a PoE injector.
D. Change ports on the switch.

Correct Answer: C
Section:
Explanation:
https://intellinetnetwork.eu/pages/what-is-a-poe-injectorThe quickest way to resolve the issue is to install a Power over Ethernet (PoE) injector to provide power to the IP phone. An unmanaged switch does not provide PoE, so an injector is needed to power the phone.

QUESTION 29
A desktop support technician is tasked with upgrading a laptop so that it has the fastest data access possible. Which of the following BEST satisfies this requirement?

A. mSATASSD
B. M.2NVMeSSD
C. 2.5SATASSD
D. 2.5SASHHD

Correct Answer: B
Section:
Explanation:
M.2 NVMe SSD provides the fastest data access possible for a laptop. It is a high-performance solid- state drive that connects directly to the motherboard through an M.2 slot.

QUESTION 30
Which of the following commonly uses NFC?

A. Contactless payments

B. IoT devices

C. Inventory tracking

D. Tethering

Correct Answer: A
Section:
Explanation:
NFC (Near Field Communication) is a wireless communication technology that is commonly used for contactless payments, mobile payments, and other mobile transactions. It allows two devices to communicate with each other when they are placed in close proximity.Contactless payments commonly use NFC (Near Field Communication). NFC is a wireless communication technology that allows two devices to communicate with each other when they are in close proximity.
Contactless payments use NFC to enable customers to make payments by simply tapping their contactless card or mobile device on a payment terminal.

QUESTION 31
A user on the marketing team uses various multimedia applications that consume a lot of memory.
The user needs to install more RAM to run these applications effectively. When the user opens the computer case, the user sees four slots in two sets of colors. Which of the following memory types is MOST likely required?

A. Dual-channel

B. Triple-channel

C. Single-channel

D. Quad-channel

E. Error correction code RAM

Correct Answer: A
Section:
Explanation:
The two sets of colors on the motherboard indicate that it supports dual-channel memory, which doubles the bandwidth available to the memory controller. Dual-channel memory requires two identical memory modules to be installed in pairs in the correct slots to work effectively. In this case, the user can install two identical RAM modules to enable dual-channel memory, which will provide better performance when using multimedia applications that consume a lot of memory.

QUESTION 32
A hardware technician is configuring a laptop, and the network administrator requires the network settings to be static. The technician successfully pings the servers by IP address but cannot ping the UNC path. Which of the following is the cause of this issue?

A. Domain Name System

B. Gateway

C. Subnet

D. IP address

Correct Answer: A
Section:
Explanation:

QUESTION 33
A technician is troubleshooting intermittent fuzzy video on a computer using a VGA to DisplayPort adapter to connect to a monitor. The monitor with a VGA connector was previously working tine for another user. The technician replaces the adapter; however, the issue persists. Which of the following should the technician do NEXT?

A. Use another brand of VGA lo DisplayPort adapter.

B. Research the issue further and formulate a new hypothesis to test.

C. Ask the user additional clarifying questions regarding the issue.

D. Document the action taken and the outcome.

Correct Answer: C
Section:
Explanation:
https://spryzensecurity.medium.com/what-is-troubleshooting-methodology-40cec6b6494The technician should ask the user additional clarifying questions regarding the issue. This will help to identify any other potential causes of the issue, such as software configuration or compatibility issues, before attempting any further troubleshooting steps.

QUESTION 34
A technician was called in to look at a user's PC. The user reported the PC was very sluggish. The HDD light on the PC was constantly on without blinking. The PC itself was slow receiving input and took a very long time to load the OS. The technician also noticed updates had failed. Which of the following is MOST likely the cause of these issues?

A. The hard disk drivers have been corrupted

B. The HDD cables need reseating.

C. A RAID disk failed.

D. The HDD has no free space.

Correct Answer: D
Section:
Explanation:
If a user's PC is very sluggish, the HDD light on the PC is constantly on without blinking, the PC itself is slow receiving input, and it takes a very long time to load the OS, the HDD has no free space is most likely the cause of these issues.
When the hard disk drive (HDD) has no free space, the computer may become slow and unresponsive. The technician should check the amount of free space on the HDD and delete any unnecessary files to free up space.

QUESTION 35
A user sends a print job lo a network printer, and the print job uses double the amount of paper as expected. Which of the following should the user configure to get the expected result?

A. Duplex

B. Collate

C. Landscape

D. Transparency

Correct Answer: A
Section:
Explanation:

The user should configure the print job to use the Duplex option, which will print on both sides of the paper and reduce the amount of paper used.

QUESTION 36
A technician made several upgrades lo a computer and then determined the power supplied by the PSU is insufficient. Which of the following would MOST likely cause the insufficiency? (Select TWO).

A. Replacing the HDD with an SSD

B. Upgrading the firmware

C. Adding an optical drive

D. Adding more RAM

E. Adding a CMOS battery

F. Upgrading the graphics card

Correct Answer: D, F
Section:
Explanation:
If a technician made several upgrades to a computer and then determined the power supplied by the PSU is insufficient, the upgraded graphics card and adding more RAM would most likely cause the insufficiency. Upgrading the graphics card and adding more RAM can increase the power consumption of a computer, which can cause the power supplied by the PSU to be insufficient.Adding more RAM and upgrading the graphics card are the most likely causes of the insufficiency of power supplied by the PSU. These upgrades require more power to operate efficiently and can cause the PSU to become insufficient.

QUESTION 37
A new version of Windows was released and a piece of software vital to the engineering department will not run on the new version. Which of the following is the BEST option to enable this department to be able to continue using this software?

A. Do not upgrade any workstations within the organization.

B. Upgrade all workstations and provide a virtual environment for the legacy software.

C. Upgrade all workstations except those used by the engineering department.

D. Purchase new workstations for the engineering department.

Correct Answer: B
Section:
Explanation:
Upgrading all workstations and providing a virtual environment for the legacy software is the best option, as it allows the engineering department to continue using the vital software while also upgrading to the latest version of Windows. This also ensures that the rest of the organization can take advantage of the latest software and security features.

QUESTION 38
An IT manager is requesting that the company buy new cables to be used with F-type connectors that are already in house. Which of the following cables should the company buy?

A. Coaxial

B. Plenum

C. Cat 5e

D. Fiber

Correct Answer: A
Section:
Explanation:
The company should buy Coaxial cables to be used with F-type connectors.

QUESTION 39
A technical lead wants to migrate all common business applications, including email and fileshares, to the cloud. Which of the following cloud concepts should be used?

A. MaaS

B. PaaS

C. SaaS

D. IaaS

Correct Answer: C
Section:
Explanation:
The cloud concept that should be used for migrating all common business applications, including email and fileshares, to the cloud is Software as a Service (SaaS).

QUESTION 40
A user reports a cell phone is getting hot. Which of the following are MOST likely to be possible causes? (Select THREE).

A. Using the device as a Wi-Fi hotspot

B. A cracked screen

C. A failing battery

D. Less than 15% free storage space on the phone

E. Privileged control

F. Recurring prompts to install OS updates

G. Granting too many application camera permissions

H. Too many open applications

Correct Answer: A, C, H
Section:
Explanation:
Using the device as a Wi-Fi hotspot, a failing battery, and too many open applications are the most likely causes of the cell phone getting hot. These actions require the phone to use more power and processing, causing it to heat up.

QUESTION 41
Which of the following network types would be used in a server room to connect virtual servers lo high-speed storage?

A. WAN

B. PAN

C. MAN

D. SAN

Correct Answer: D
Section:
Explanation:
A Storage Area Network (SAN) is a dedicated, high-speed network that connects servers to data storage devices. SANs are used in server rooms to provide high-speed storage access to virtual servers.

QUESTION 42

A technician is inspecting a projector that is displaying fuzzy images. Which of the following actions would provide the BEST solution?

A. Adjusting the lens
B. Changing the filter
C. Replacing the video cable
D. Reseating the lamp

Correct Answer: A
Section:
Explanation:
Adjusting the lens is the best solution to improve image quality in a projector. The lens can become misaligned over time or during transportation, causing the image to appear fuzzy.

QUESTION 43
A help desk technician thinks a desktop PC has failed due to a defective power supply. Which of the following steps should the technician take NEXT?

A. Inquire about environmental or infrastructure changes.
B. Conduct external or internal research based on symptoms.
C. Establish a plan of action to resolve the problem and implement the solution.
D. Document the findings, actions, and outcomes.

Correct Answer: C
Section:
Explanation:
Once the technician has determined that the power supply is likely to be defective, they should establish a plan of action to resolve the problem. This may include replacing the power supply or further testing to confirm that it is indeed defective. After establishing a plan of action, the technician should implement the solution and verify that it has resolved the issue.

QUESTION 44
A salesperson is using a weather application on a mobile device. The application appears to be draining the device's battery very quickly. Which of the following is the BEST action for the salesperson to take in order to view weather forecasts while travelling?

A. Enable the GPS service to ensure accurate location detection.
B. Manually enter office locations in the weather application.
C. Configure less frequent location checks using cellular location services.
D. Use the offices' Wi-Fi IP addresses as the geolocation mechanism.

Correct Answer: C
Section:
Explanation:
Reducing the frequency of location checks using cellular location services will consume less battery power while still allowing the user to view weather forecasts while travelling. The other options may not solve the battery drain issue while using the weather application. Configuring less frequent location checks using cellular location services is the best option for the salesperson to view weather forecasts while traveling without draining the battery too quickly.Reference:
https://www.makeuseof.com/tag/5-ways-improve-battery-life-android-phone/

QUESTION 45
Which of the following is a method that can be used to securely connect a remote user's laptop to a corporate server?

A. WAN

B. VPN

C. SSL

D. DHCP

Correct Answer: B
Section:
Explanation:
A Virtual Private Network (VPN) is a secure method for connecting a remote user's laptop to a corporate server. VPNs use encryption to protect data transmitted over the internet.

QUESTION 46
A user creates a support ticket to report a conference room projector that does not work. The user says that even though the provided cables are being used, the projector screen shows the following error message:
No signal input.Which of the following describes the FIRST action that should be taken?

A. Verify that the projector is turned on.

B. Verify that the user is using an approved OS.

C. Replace the projector bulb.

D. Check the video cable and replace it if necessary.

Correct Answer: D
Section:
Explanation:
The most common reasons you may be seeing the "No Signal" message: The projector and the source device are not connected correctly. The first action should be to check the video cable and replace it if necessary, as the error message suggests that the projector is not receiving a signal from the laptop. Verifying that the projector is turned on and checking the bulb would come after verifying the video cable.

QUESTION 47
Which of the following is the PRIMARY security concern with virtual machine escape?

A. Cross-site scripting

B. Compromising the hypervisor

C. Overutilization of resources

D. Rogue virtual machines installed on the hypervisor

Correct Answer: B
Section:
Explanation:
The primary security concern with virtual machine escape is compromising the hypervisor, which can allow attackers to gain access to other virtual machines or the host system. Virtual machine escape refers to an attack that allows a guest virtual machine to break out of its isolated environment and access other parts of the system.

QUESTION 48
Which of the following network services allows a networked device to always be assigned the same IP address based on the device's MAC address?

A. DHCP

B. LDAP

C. UTM

D. DNS

Correct Answer: A
Section:
Explanation:
Dynamic Host Configuration Protocol (DHCP) allows a networked device to always be assigned the same IP address based on the device's MAC address. DHCP can also assign other network configuration settings to devices automatically.

QUESTION 49
A startup is looking to immediately expand its data center but does not have the personnel or space to manage everything internally. The organization has multiple small offices and remote users with large computational and storage- solution requirements. Funding is not an issue for the company.
Which of the following can BEST accomplish the company's goals?

A. SaaS

B. IaaS

C. ISP

D. SON

Correct Answer: B
Section:
Explanation:
IaaS is a cloud computing model where a third-party provider hosts infrastructure components such as servers, storage, and networking on behalf of customers. This allows the startup to immediately expand its data center without the need for additional personnel or space to manage everything internally. Additionally, IaaS allows remote users to easily access the required computational and storage resources from multiple small offices.Infrastructure as a Service (IaaS) can provide the startup with the necessary computational and storage solutions without the need for internal management. IaaS allows organizations to rent computing resources from a third-party provider instead of owning and maintaining them in-house.

QUESTION 50
A technician is replacing a ribbon on a printer that produces faded text and Images when priming.
Which of the following types of primers is the technician working on?

A. Impact

B. Inkjet

C. Laser

D. Thermal

Correct Answer: A
Section:
Explanation:
An impact printer is a type of printer that uses a ribbon to produce text and images on paper. If an impact printer is producing faded text and images when printing, it could be due to a worn-out ribbon that needs to be replaced. The technician would need to replace the ribbon on the impact printer to resolve the issue.A ribbon is a consumable component used in impact printers that uses a cloth or plastic strip coated with ink to produce text and images on paper.
Examples of impact printers include dot matrix printers and line printers. Reference: Study Guide Section 4.6 - Printer technologies

QUESTION 51
A user that works is sales is reporting that the output on each page printed from a laser has duplicate images. Which of the following should be performed FIRST to eliminate the ghost images?

A. Change the paper weight setting.

B. Replace the printer's fuser.

C. Upgrade the printer firmware.

D. Clean the toner drums and rollers

Correct Answer: D

Section:

Explanation:

If a laser printer is producing output with duplicate images (also known as ghost images), it could be due to an issue with the toner drums and rollers. The first step to eliminate the ghost images would be to clean the toner drums and rollers to remove any excess toner that may be causing the issue.Ghost images are a common issue in laser printers where an image or text from a previous page appears faintly on subsequent pages. The cause of this issue is usually due to toner residue on the drum or rollers, which can be removed by cleaning the toner drums and rollers. Reference: Study Guide Section 4.6 - Printer technologies

QUESTION 52

Which of the following is used to implement network security polices for an environment?

A. Managed switch

B. Repeater

C. Firewall

D. Gateway

Correct Answer: C

Section:

Explanation:

It is designed to protect an organization's network infrastructure and data from unauthorized access, while allowing legitimate traffic to pass through. Firewalls can be configured to enforce security policies that block certain types of traffic, limit access to specific network resources, and prevent attacks such as malware and phishing.A firewall is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules. It establishes a barrier between a trusted internal network and an untrusted external network, such as the Internet. Firewalls are used to implement network security policies for an environment by controlling access to the network and protecting it from unauthorized access.A firewall is used to implement network security policies. It monitors incoming and outgoing traffic based on predetermined security rules and can block traffic that does not meet the defined criteria.Reference: CompTIA A+ Certification All-in-One Exam Guide, Tenth Edition by Mike Meyers (Chapter 6, page 243)

QUESTION 53

A technician is troubleshooting a point-of-sale primer that Is printing blank receipts. Which of the following should the technician do to resolve the Issue?

A. Verify the correct type of paper is loaded.

B. Install the latest print driver.

C. Check to see if the default printer has been changed.

D. Ensure the printer is connected to power.

Correct Answer: A

Section:

Explanation:

Verifying the correct type of paper is loaded is the best solution for resolving the issue of blank receipts being printed by a point-of-sale printer. Some receipt printers require a specific type of paper, and using the wrong type can result in blank receipts. Reference:https://www.techwalla.com/articles/what-are-the-causes-of-blank-receipts-from-a-printer

Top of Form Verify the correct type of paper is loaded. If a point-of-sale printer is printing blank receipts, one possible cause could be that the wrong type of paper is loaded in the printer. Thermal printers require thermal paper to print properly. If regular paper is loaded instead of thermal paper, the printer will not be able to produce an image on the paper and will print blank receipts.

QUESTION 54

To control costs a company provides a limited number or users with company phones One of these users opens a support ticket because the phone no longer allows internet Drowsing over a cellular connection The user acknowledges that the phone worked before the user's child streamed several movies using the device Which of the following describes why the phone cannot browse the Internet?

A. The child accidentally connected to a neighbor's WLAN

B. The company's group policy disabled the device

C. The device has a data cap and has reached that limit

D. The device's plan has been unpaid

Correct Answer: C
Section:
Explanation:
It is common for companies to place a data cap on the devices they provide to their employees, to control costs. If a user has exceeded the data cap, the phone may no longer allow internet browsing over a cellular connection. This is usually because the cellular data usage has exceeded the allotted amount for the particular plan the device is on, and the service provider has temporarily suspended the data connection.
It is unlikely that the child accidentally connected to a neighbor's WLAN because this would not affect the cellular data connection. Similarly, it is unlikely that the company's group policy has disabled the device, as this would likely affect all devices under the same policy. If the device's plan has been unpaid, the service provider would likely temporarily suspend all services, not just the cellular data connection.
Reference: CompTIA A+ Core 1 Exam Guide, page 329.

QUESTION 55
A user is installing a new display on a desktop computer that only has a single DVI port for video input and a single HDMI port tot video output Which of me following does the technician need to complete the setup?

A. DigitaMo-analog converter

B. A/v switcher

C. DisplayPort to HDMI adapter

D. DVI to HDMI cable

Correct Answer: D
Section:
Explanation:
The technician will need to connect the DVI port on the computer to the new display's HDMI port. To do this, a DVI to HDMI cable will be needed. This type of cable will allow the computer's DVI video signal to be transmitted to the new display's HDMI port.
A digital-to-analog converter (DAC) is used to convert a digital signal to an analog signal. An A/V switcher is used to switch between multiple audio and video sources and display them on a single monitor or display.
A DisplayPort to HDMI adapter is used to convert a DisplayPort signal to an HDMI signal, but it is not necessary in this scenario as the computer has a DVI port and not a DisplayPort.
Reference: CompTIA A+ Core 1 Exam Guide, page 199.

QUESTION 56
A technician just finished assembling a new PC for a client. Upon POST, the device presents an unspecified beep code and turns off automatically after five seconds. The technician double-checks the bill of materials for the new build and confirms all items have been installed. Which of the following should the technician do NEXT?

A. Ensure thermal paste is being used on the CPU.

B. Check to make sure that any video cards have auxiliary power cabling connected.

C. Verify the header panel connector is properly connected.

D. Spot-check that the I/O shield for the motherboard is properly installed.

Correct Answer: C
Section:

Explanation:

The technician should verify the header panel connector is properly connected. A beep code is a diagnostic tool used by motherboards to indicate issues with hardware components. This beep code may be indicating an issue with the connection between the motherboard and the case's header panel connector. This connector is responsible for providing power to the system and any connected peripherals. Therefore, the technician should verify the connection is secure and properly connected before attempting any other troubleshooting steps.

QUESTION 57
Which of the following cloud models maintains access, even when a local internet outage occurs?

A. Private

B. SaaS

C. Community

D. Public

Correct Answer: A
Section:
Explanation:
In a private cloud model, the cloud infrastructure is maintained within a company's own data center and is used exclusively by that company. Private clouds offer the advantage of maintaining access even when a local internet outage occurs, since the cloud infrastructure is not dependent on a publinetwork connection.
Software as a Service (SaaS) is a cloud model in which software applications are hosted by a thirdparty provider and made available to customers over the internet. SaaS is not designed to maintain access in the event of a local internet outage.
A community cloud is a shared infrastructure that is used by multiple organizations, typically from the same industry or with similar requirements. Community clouds are not designed to maintain access in the event of a local internet outage.
A public cloud is a cloud infrastructure that is maintained by a third-party provider and is made available to the public over the internet. Public clouds are not designed to maintain access in the event of a local internet outage.
Reference: CompTIA A+ Core 1 Exam Guide, page 258.

QUESTION 58
A user is researching hard drives to upgrade a PC and has decided to purchase a NVMe drive. Which of the following Should the user confirm are available on the PC before making the purchase? (Select TWO).

A. SATA

B. M.2

C. PCIe

D. SAS

E. SCSI

F. DRAM

Correct Answer: B, C
Section:
Explanation:
NVMe (Non-Volatile Memory Express) drives are high-speed solid-state drives that utilize the PCIe (Peripheral Component Interconnect Express) interface to connect to the motherboard. Before purchasing an NVMe drive, the user should confirm that the PC has an available M.2 slot for the drive and that the PC has a PCIe interface for the M.2 slot.
SATA (Serial ATA) is an older interface for hard drives and is not compatible with NVMe drives. SAS (Serial Attached SCSI) is a newer interface for hard drives and is typically used for enterprise-level storage systems.
SCSI (Small Computer System Interface) is a parallel interface for hard drives that is primarily used in high-end workstations and servers. DRAM (Dynamic Random Access Memory) is a type of memory commonly used in computers, but it is not relevant to the storage of data on a hard drive.
Reference: CompTIA A+ Core 1 Exam Guide, page 267.

QUESTION 59

A network technician has been tasked with creating a patch cable. The RJ45 connectors will not slay attached to the cable. Which of the following tools Is needed to fix this Issue?

A. Cable tester

B. Crimper

C. Punchdown tool

D. Loopback plug

Correct Answer: B

Section:

Explanation:

A crimper is a tool that is used to crimp (attach) an RJ45 connector onto the end of a patch cable. The crimper applies pressure to the connector to make a permanent connection between the connector and the cable, ensuring that the connector will stay attached to the cable.

A cable tester is used to test the connectivity of a network cable. A punchdown tool is used to terminate network cables in a patch panel or keystone jack. A loopback plug is a diagnostic tool that is used to test network interfaces by simulating network traffic.

Reference: CompTIA A+ Core 1 Exam Guide, page 92.

QUESTION 60

Which of the following allows a switch to be divided into separate logical networks?

A. VLAN

B. SSL VPN

C. NAT

D. RADIUS

Answer: A

Correct Answer: A

Section:

Explanation:

A Virtual LAN (VLAN) is a network topology that allows a switch to be divided into separate logical networks. This allows for the creation of multiple broadcast domains within a single physical network, improving network segmentation and security. With VLANs, you can segment your network so that different departments, applications, or users are isolated from each other, improving network security and performance.

QUESTION 61

The IT department issued a corporate smartphone to a user, but the user returned the device stating it had connectivity Issues. The user claimed the device functioned on WI-FI but all connectivity to cloud services was lost as soon as the device was taken off site. Which of the following issues was MOST likely affecting the device?

A. MDM was never properly set up on the device.

B. S/MIME certificates were corrupted and needed to be reloaded.

C. Bluetooth on the device was disabled by mistake.

D. The device never had a proper SIM card installed.

Correct Answer: D

Section:

Explanation:

A SIM card is needed for the device to use cellular network services, so without it, the device will be unable to connect to the cloud services when taken off site. MDM (Mobile Device Management) can be used to manage settings and access on a device, but it is not necessary for the device to be able to use cloud services. S/MIME (Secure/Multipurpose Internet Mail Extensions) certificates are used to encrypt and digitally

sign emails, and are not related to device connectivity. Bluetooth can be used to connect devices together, but it is not necessary for the device to be able to use cloud services.

QUESTION 62
A technician is troubleshooting a smartphone that has a large dark area on the screen. The screen has no damage to Indicate that It is cracked. Which of the following BEST describes why a blot Is on the screen?

A. Digitizer damage

B. Improper charging

C. Ambient light sensor damage

D. Liquid damage

Correct Answer: A
Section:
Explanation:
A blot on the screen of a smartphone is most likely caused by damage to the digitizer, which is the part of the device responsible for interpreting touch input. Improper charging is unlikely to cause a blot on the screen, as is damage to the ambient light sensor. Liquid damage is a possibility, but it is more likely to cause discoloration or other physical damage to the screen.

QUESTION 63
A technician is working on a help desk ticket for a user who wants the filament replaced in a 3-D printer. Which of the following should the technician do to remove the old filament and load the new one?

A. Preheat the nozzle to melting temperature.

B. Cut a sharp angle on the end of the strand.

C. Push the filament along until resistance is felt.

D. Withdraw the filament and remove the spool.

Correct Answer: A
Section:
Explanation:
A technician is working on a help desk ticket for a user who wants the filament replaced in a 3-D printer. To remove the old filament and load the new one, the technician should preheat the nozzle to melting temperature. After the nozzle is heated, the technician should withdraw the filament and remove the spool. Then, cut a sharp angle on the end of the new strand, and push it along until resistance is felt.

QUESTION 64
A user is unable to plug a USB 3.0 device into a USB port. Upon inspection, a technician notices the USB 3.0 port appears to be slightly smaller than the other connections. Which of the following Is the MOST likely cause?

A. A foreign object Is stuck Inside the port

B. The cable connection utilized the wrong orientation.

C. The USB cable is physically damaged.

D. The USB port belongs to a different form factor.

Correct Answer: D
Section:
Explanation:
USB 3.0 ports are slightly smaller than other USB connections, so if the port appears to be the wrong size, it is likely that the port belongs to a different form factor. This can be caused by a number of factors, such as the device being too old to support USB 3.0, or the device not having a USB 3.0 port in the first place.

QUESTION 65

A technician has set up a new conference room with a TV and a video soundbar. The technician wants to test the system with a conference call. During the test, the TV speaker produces sound, but the soundbar does not. Which of the following is the MOST likely cause of the issue?

A. The volume on the TV needs to be turned up.

B. The conference call needs to be unmuted for audio.

C. An incorrect HDMI cable is being used.

D. The TV's HDMI-ARC port is not being used.

Correct Answer: D
Section:
Explanation:
HDMI-ARC (Audio Return Channel) is an HDMI connection that allows audio to be sent from the TV to an external sound system, such as a soundbar. If the TV's HDMI-ARC port is not being used, then the soundbar will not receive any audio from the TV and thus will not produce any sound. To resolve the issue, the technician should ensure that the TV's HDMI-ARC port is being used to connect the TV to the soundbar.

QUESTION 66
A company wants to give third-party developers access to the corporate network through desktop environments that the company can control. Which of the following can BEST achieve these requirements?

A. Sandbox

B. VDI

C. Private cloud

D. Saas

Correct Answer: B
Section:
Explanation:
VDI is a technology that allows a company to provide desktop environments to third-party developers while still maintaining control over the corporate network. VDI creates virtual desktops on a remote server, and each user gets their own desktop environment that is isolated from the other users. This allows the company to maintain control over the corporate network, as the virtual desktops are not directly connected to the
corporate network.

QUESTION 67
A tier one technician has spent the past thirty minutes troubleshooting an Issue With an end user's network connection After a solution was implemented, the end user rebooted the system, tested the Issue, and confirmed the Issue was resolved. Which of the following should the technician do NEXT?

A. Document the findings, actions, and solution in the company knowledge base

B. Advise the user to try the solution before contacting the help desk if the Issue happens again

C. Establish a theory of probable cause

D. Escalate the Issue to the tier two support team for resolution.

Correct Answer: A
Section:
Explanation:

According to the Official CompTIA A+ Core 1 Study Guide (220-1101) 1, the correct answer is A.
Document the findings, actions, and solution in the company knowledge base.
The explanation is that after resolving an issue, a technician should always document what was done and how it was fixed. This helps to create a record of the problem and its solution for future reference and also

https://www.comptia.org/training/books/a-core-1-220-1101-study-guide By documenting the findings, actions, and solution in the company knowledge base, it will help to ensure that if the Issue happens again, the technician or a different technician will be able to quickly and easily find the solution and resolve the Issue. Additionally, it is important to document the solution so that the same Issue does not need to be troubleshot multiple times in the future.

QUESTION 68
A user is looking for a way to increase the total RAM in a system without upgrading the hardware.
Which of the following should the user perform to complete this task?

A. Run a burn-in application

B. Create a VM.

C. Install hardware-tuning software.

D. Set up virtual memory.

Correct Answer: D
Section:
Explanation:

Virtual memory is a software-based memory management system that allows a computer to use hard disk storage space as RAM. This can be used to increase the total RAM in a system without upgrading the hardware. To set up virtual memory, the user should go to the System Properties window and select the Advanced tab. In the Performance section, click on the Settings button, which will open the Performance Options window. Then, click on the Advanced tab and click on the Change button in the Virtual memory section. Finally, select the option to Automatically manage paging file size for all drives, and then click OK to save the changes.

QUESTION 69
A user's track pad has stopped working. Which of the following should the user do to resolve the track pad's functionality?

A. Reinstall the mouse drivers

B. Use the Function key.

C. Calibrate the digitizer

D. Configure the mouse settings

Correct Answer: B
Section:
Explanation:

The correct answer is B. Use the Function key.
The explanation is that some laptops have a Function key (Fn) that can be used to toggle the track pad on or off. This can be useful if the user wants to use an external mouse instead of the track pad, or if the track pad is accidentally activated by palm movements. The user should look for a Fn key on their keyboard and a track pad icon on one of the other keys, such as F5 or F9, and press them together to enable or disable the track pad.

QUESTION 70
A technician is troubleshooting a laptop that has a blank LCD panel. The technician shines a flashlight into the LCD and sees a faint image. Which of the following BEST describes the issue?

A. Defective inverter

B. Incomplete video driver

C. Incorrect input source

D. Burned-out bulb

Correct Answer: A
Section:
Explanation:

an inverter is a device that converts DC power from the laptop's battery or AC adapter to AC power for the backlight of the LCD panel. If the inverter is defective, the backlight will not work and the LCD panel will appear blank or very dim.
The user can still see a faint image if they shine a flashlight into the LCD because the LCD itself is still working.

QUESTION 71
The motherboard on a user's company laptop was recently replaced Now the user is unable to log in using the fingerprint reader The fingerprint reader is working but it does not recognize the user's fingerprint Which of the following should a technician perform FIRST to fix the issue?

A. Restore the system to a previous recovery point

B. Reinstall the fingerprint software

C. Access the BIOS and clear the TPM

D. Update the drivers and the fingerprint software

E. Flash the newest BIOS firmware that is available

Correct Answer: B
Section:
Explanation:
If a user is unable to log in using the fingerprint reader on a company laptop after the motherboard was replaced, it could be due to an issue with the fingerprint software. The first step to fix the issue would be for the technician to reinstall the fingerprint software.

QUESTION 72
A customer's laptop is making clicking sounds in the area where non-volatile storage is installed. A technician examines the laptop and confirms the issue. Which of the following is the most appropriate replacement part?

A. 7,200rpm HDD

B. NVMe SSD

C. M.2 SATA SSD

D. SCSI 15,000rpm HDD

Correct Answer: B
Section:
Explanation:
NVMe stands for Non-Volatile Memory Express, and it is a type of SSD (solid state drive) that uses PCIe (Peripheral Component Interconnect Express) interface to connect to a computer. NVMe SSDs offer faster performance and lower latency than other types of SSDs, such as SATA (Serial ATA) or M.2 SATA. If a user reports that a PC occasionally fails to boot and makes clicking sounds in the area where non-volatile storage is installed, it indicates that the hard drive is failing and needs to be replaced with an NVMe SSD.

QUESTION 73
Which of the following devices is capable of dynamically distributing an IP address?

A. Hub

B. Switch

C. Injector

D. Router

Correct Answer: D
Section:
Explanation:
A router is a device that connects multiple networks and forwards packets between them based on their destination IP addresses. A router can also perform DHCP (Dynamic Host Configuration Protocol) function, which means it can dynamically distribute IP addresses to devices on its network.
A router can also provide other features, such as firewall, NAT (Network Address Translation), VPN (Virtual Private Network), and QoS (Quality of Service).

QUESTION 74
Which of the following server roles does RADIUS perform?

A. DNS

B. AAA

C. Mail server

D. Syslog

Correct Answer: B
Section:
Explanation:
AAA stands for Authentication, Authorization, and Accounting, and it is a framework that provides security services for network access control. Authentication verifies the identity of a user or device that requests access to a network resource. Authorization determines what level of access or privileges are granted to a user or device based on their identity or role. Accounting tracks and records the usage of network resources by users or devices for billing or auditing purposes. RADIUS (Remote Authentication Dial-In User Service) is a protocol that implements AAA functions by communicating with a central server that stores user credentials and policies.

QUESTION 75
A technician is installing a WAP in the company break room. The new access point should have a rating of higher than 50Mbps and minimal range to avoid interference with other access points.
Which of the following 802.11 standards should the technician select?

A. Ac

B. B

C. G

D. n

Correct Answer: A
Section:
Explanation:
Ac stands for 802.11ac, which is a wireless networking standard that operates in the 5 GHz frequency band and offers a maximum data rate of 1.3 Gbps. 802.11ac is also backward compatible with 802.11a, 802.11b, 802.11g, and 802.11n standards. If a technician wants to install a WAP (wireless access point) in the company break room that has a rating of higher than 50 Mbps and minimal range to avoid interference with other access points, they should select the 802.11ac standard.

QUESTION 76
A user reports that a PC occasionally fails to boot. The user reboots the PC, but the performance is degrading. The technician hears a strange, repetitive, ticking noise coming from the PC. Which of the following should the technician do first?

A. Try to extract data.

B. Reseat the RAM modules.

C. Inspect the fan.

D. Check the CD tray.

Correct Answer: A

Section:

Explanation:

If a user reports that a PC occasionally fails to boot and makes a strange, repetitive, ticking noise, it indicates that the hard drive is suffering from a mechanical failure, also known as the click of death.

This means that the hard drive is likely to fail completely soon and lose all the data stored on it.

Therefore, the technician should try to extract or backup the data as soon as possible before replacing the hard drive with a new one.

QUESTION 77

Which of the following wireless technologies would a company most likely implement for inventory management?

A. NFC

B. 5G

C. Bluetooth

D. RFD

Correct Answer: D

Section:

Explanation:

RFD stands for Radio Frequency Identification, which is a technology that uses radio waves to identify and track objects that have RFID tags attached to them. RFID tags are small devices that store information and can be read by RFID readers without direct contact or line of sight. RFID can be used for inventory management, as it can provide real-time visibility and accuracy of the location, quantity, and status of the items in a warehouse, store, or supply chain .

QUESTION 78

A user tripped on an Ethernet cable and disconnected it from the wall jack. A technician visually inspects the cable and notices that the plastic prong on the connector of the cable is completely missing.

Which of the following tools should the technician use to resolve this issue? (Select two).

A. Cable stripper

B. Network crimper

C. Toner probe

D. Punchdown tool

E. Multimeter

F. Loopback plug

Correct Answer: A, B

Section:

Explanation:

According to the CompTIA A+ Core 1 (220-1101) Certification Study Guide1, a network crimper and a cable stripper are the tools that a technician should use to resolve this issue. A network crimper is used to attach a new RJ-45 onnector to the end of the cable, and a cable stripper is used to remove the outer insulation of the cable and expose the twisted pairs of wires. A toner probe, a punchdown tool, a multimeter, and a loopback plug are not needed for this task.

Here are some web resources that explain how to repair an Ethernet cable:
Ethernet Cable Repair - iFixit: This guide provides step-by-step instructions and pictures on how to fix a broken Ethernet cable.
How to Repair a Cut Cat5e Ethernet Cable - wikiHow: This article shows how to solder the wires of a cut Ethernet cable and use shrink tube to cover the joints.
Amazon.com: Ethernet Cable Repair Kit: This page lists some products that can be used to repair an Ethernet cable, such as crimping tools, connectors, testers, and strippers.

QUESTION 79
A systems administrator needs to set up a multifunction printer for the legal department. The legal department deals with sensitive documents and requires a secure method of releasing print jobs.
Which of the following should the systems administrator configure to meet the department's
security requirements?

A. SMB settings

B. User authentication

C. Audit logging

D. Wired connection

Correct Answer: B
Section:
Explanation:
This option requires the user to enter a PIN code or swipe a smart card before the printer releases their print job. This way, the user can verify their identity and ensure that no one else can access their sensitive documents.
The other options are not as secure or effective as user authentication. SMB settings are used to share files and printers over a network, but they do not provide a secure method of releasing print jobs. Audit logging records the details of each print job, but it does not prevent unauthorized access to the printed documents. Wired connection reduces the risk of wireless interference or hacking, but it does not guarantee that the print jobs are only retrieved by the intended recipient.

QUESTION 80
A technician is asked to purchase and install a line-of-sight wireless system that provides a stable network connection between two buildings. Which of the following needs to be considered prior to purchasing the system?

A. IP address range

B. SSID broadcast

C. Firewall rules

D. Regulatory power limits

Correct Answer: D
Section:
Explanation:
A line-of-sight wireless system is a type of wireless communication that requires a clear and unobstructed path between the transmitter and the receiver. This can be achieved by using directional antennas that focus the radio signals in a narrow beam. A line-of-sight wireless system can provide a stable network connection between two buildings that are within the range and visibility of each other.
However, before purchasing and installing a line-of-sight wireless system, one of the factors that needs to be considered is the regulatory power limits. The power limit is the maximum amount of radio frequency (RF) energy that a transmitter can emit. Different countries and regions have different regulations and standards for the allowable power levels of wireless devices. Exceeding the power limit can cause interference with other wireless services, such as aviation, radio, television, etc. It can also pose health and safety risks to humans and animals.
Therefore, a technician should check the local laws and regulations for the power limits of the wireless system before buying and installing it. The technician should also use a proper tool to measure the actual power output of the transmitter and adjust it accordingly. The technician should also ensure that the transmitter and receiver are aligned properly and have a clear line of sight without any obstacles.
The other options are not relevant to the line-of-sight wireless system. The IP address range is a set of numerical identifiers that are assigned to devices on a network. It does not affect the physical transmission of wireless signals. The SSID broadcast is a feature that allows a wireless network to announce its name and availability to nearby devices. It does not affect the stability of the network connection between two buildings. The firewall rules are a set of policies that control the incoming and outgoing traffic on a network. They do not affect the line-of-sight wireless system.
Reference:

Wireless line-of-sight, non-line-of-sight, beyond-line-of-sight propagation
Point-to-point Wi-Fi bridging between buildings—the cheap and easy way
How Does Wireless Internet, or Line of Sight Internet Work?
Line-of-Sight Transmission - Engineering LibreTexts
What is Line of Sight (LoS)? - Definition from Techopedia

QUESTION 81
A laptop is experiencing slow performance writing data. Which of the following is the best component for a technician to upgrade to fix the issue?

A. RAM

B. HDD

C. TPM

D. CPU

Correct Answer: B
Section:
Explanation:
The best component for a technician to upgrade to fix the issue of slow performance writing data is B. HDD. HDD stands for hard disk drive, which is a type of storage device that uses physical disks to store data. HDDs have moving parts that can slow down the read and write operations, especially when the data is fragmented or the disk is full12.
A better alternative to HDDs is SSDs, which stands for solid state drives. SSDs use flash memory and do not have any moving parts. SSDs can read and write data faster and use less power, which can improve the performance and battery life of the laptop13. Upgrading to an SSD can provide a significant improvement in performance2.
The other components are not as relevant or effective as upgrading the HDD. RAM stands for random access memory, which is a type of memory that stores temporary data for the CPU to process. RAM can affect the overall speed of the laptop, but it does not directly affect the writing performance of the storage device1. TPM stands for trusted platform module, which is a security chip that encrypts and protects data on the laptop. TPM does not affect the performance of the laptop, but rather its security1. CPU stands for central processing unit, which is the main processor of the laptop that executes instructions and calculations. CPU can affect the performance of the laptop, but it is not as easy or cost-effective to upgrade as the HDD1.

QUESTION 82
A technician is troubleshooting a PC that makes grinding noises and eventually shuts down. The technician determines the PC is overheating. Which of the following is most likely failing?

A. RAM

B. Motherboard

C. SSD

D. CPU fan

Correct Answer: D
Section:
Explanation:
The most likely component that is failing and causing the PC to overheat is D. CPU fan. The CPU fan is a vital part of the cooling system that prevents the CPU from overheating by blowing air over the heatsink and dissipating the heat. If the CPU fan is faulty, noisy, or clogged with dust, it can reduce the airflow and cause the CPU temperature to rise12. This can result in poor performance, instability, or shutdowns of the PC.
The other components are less likely to be the cause of overheating. RAM, motherboard, and SSD do not generate as much heat as the CPU and usually do not require fans to cool them down1. They may overheat if there is poor ventilation in the case or if they are defective, but they are not as common as a failing CPU fan.
Therefore, the correct answer is D. CPU fan. This is the most likely component that is failing and causing the PC to overheat.

QUESTION 83
Which of the following best describes the type of cloud a healthcare company should use for a patient record portal?

A. Community

B. Hybrid

C. public

D. Private

Correct Answer: D
Section:
Explanation:
A patient record portal is a web-based application that allows patients to access their health information, such as medical history, test results, prescriptions, and appointments. A patient record portal needs to be secure, reliable, and compliant with the health data regulations of the country or region where it operates1.

The type of cloud that best describes the type of cloud a healthcare company should use for a patient record portal is D. Private. A private cloud is a cloud computing model that is dedicated to a single organization and provides exclusive access and control over its resources and data2. A private cloud can offer the following benefits for a patient record portal:

Enhanced security and privacy: A private cloud can protect the sensitive health data from unauthorized access or breaches by using encryption, firewalls, authentication, and other security measures. A private cloud can also comply with the health data regulations, such as HIPAA in the US or GDPR in the EU, by ensuring that the data is stored and processed within the jurisdiction of the organization3.

Improved performance and reliability: A private cloud can optimize the speed and availability of the patient record portal by using dedicated servers, network bandwidth, and storage capacity. A private cloud can also ensure that the patient record portal can handle high demand and traffic without compromising its quality or functionality3.

Greater customization and flexibility: A private cloud can tailor the patient record portal to the specific needs and preferences of the organization and its patients by using customized applications, interfaces, and features. A private cloud can also scale up or down the resources and services of the patient record portal as needed without affecting its performance or cost3.

QUESTION 84
A technician is selecting RAM for a new high-end workstation. The motherboard has eight slots that support DDR5 memory. Which of the following should the technician do to optimize performance?

A. Use the minimum number of modules.

B. Increase the virtual RAM.

C. Increase memory timings.

D. Utilize all channels.

Correct Answer: D
Section:
Explanation:
The best option that the technician should do to optimize performance is D. Utilize all channels. This option means that the technician should install the RAM modules in a way that maximizes the number of memory channels that are used by the motherboard. Memory channels are pathways that connect the memory controller to the RAM modules, and they allow data to be transferred between them. The more memory channels that are used, the higher the memory bandwidth and performance1.

DDR5 memory supports up to eight memory channels per module, which is twice as many as DDR42.

However, not all motherboards can support eight channels per module, and some may only support four or two channels per module. Therefore, the technician should check the motherboard specifications and manual to determine how many memory channels it supports and how to install the RAM modules accordingly.

For example, if the motherboard supports four channels per module, then the technician should install four RAM modules in slots 1, 3, 5, and 7 to use all 16 available channels. If the motherboard supports two channels per module, then the technician should install eight RAM modules in all slots to use all 16 available channels. If the technician installs fewer modules than the number of slots, then some channels will be left unused and the performance will be lower1.

QUESTION 85
A technician is upgrading a desktop's storage with the fastest option available. The desktop's motherboard is equipped with SATA Ill, NVMe, and IDE. Which of the following should the technician choose for the best performance?

A. PCIe SSD connected via NVMe interface

B. 3.5in (8.9cm) 10,000rpm HDD connected via IDE interface

C. M.2 SSD connected via SATA interface

D. 2.5in (6.35cm) SSD connected via SATA interface

Correct Answer: A
Section:
Explanation:
The best option that the technician should choose for the best performance is
A) PCIe SSD connected via NVMe interface. This option means that the technician should install a solid state drive (SSD) that uses the PCIe (Peripheral Component Interconnect Express) bus and the NVMe (Non-Volatile Memory Express) protocol to communicate with the motherboard. This option can offer the following advantages:
Faster speed: PCIe SSDs can transfer data faster than SATA or IDE SSDs, as they use more lanes and have higher bandwidth. PCIe SSDs can reach speeds of up to 7,000 MB/s, while SATA SSDs are limited to 600 MB/s and IDE SSDs are even slower12. NVMe is a protocol that is designed specifically for SSDs and can optimize their performance by reducing latency and increasing parallelism3.
Smaller size: PCIe SSDs can be smaller than SATA or IDE SSDs, as they do not require additional cables or connectors. PCIe SSDs can come in different form factors, such as M.2 or U.2, which can fit in different slots on the motherboard12.
Higher reliability: PCIe SSDs can be more reliable than SATA or IDE SSDs, as they have less moving parts and are less prone to mechanical failures or data corruption. PCIe SSDs can also support features such as error correction and wear leveling, which can enhance their durability and lifespan12.

QUESTION 86
Which of the following technologies can be used to harden guest virtual machines?

A. Containerization

B. Network isolation

C. Resource reservation

D. vTPM

Correct Answer: D
Section:
Explanation:
A virtual Trusted Platform Module (vTPM) is a technology that can be used to harden guest virtual machines by providing them with a secure cryptographic device. A vTPM can store encryption keys, certificates, and passwords, and can perform integrity checks on the guest operating system and applications. A vTPM can also enable features such as BitLocker and Credential Guard in Windows 10 virtual machines.
A) Containerization is a technology that can be used to isolate applications from the underlying operating system and hardware resources. Containerization does not directly harden guest virtual machines, but rather provides a lightweight alternative to virtualization.
B) Network isolation is a technology that can be used to separate network traffic between different virtual machines or groups of virtual machines. Network isolation can help prevent unauthorized access or attacks on guest virtual machines, but it does not harden them internally.
C) Resource reservation is a technology that can be used to guarantee a minimum amount of CPU, memory, disk, or network resources for a virtual machine or a group of virtual machines. Resource reservation can help improve the performance and availability of guest virtual machines, but it does not harden them against security threats.
D) vTPM is a technology that can be used to harden guest virtual machines by providing them with a secure cryptographic device. A vTPM can store encryption keys, certificates, and passwords, and can perform integrity checks on the guest operating system and applications.
Reference: CompTIA A+ Core 1 (220-1101) Certification Study Guide, page 3161.

QUESTION 87
Which of the following best describes the primary function of a spam gateway?

A. Serves as a repository for email routing logs

B. Blocks unrequested ICMP packets from external networks

C. Categorizes incoming network messages

D. Mitigates DDoS attacks

Correct Answer: C
Section:
Explanation:
A spam gateway is a software solution that filters email messages based on various criteria, such as sender, recipient, subject, content, attachments, and URLs. A spam gateway categorizes incoming network messages as spam or non-spam, and either blocks, quarantines, or delivers them accordingly. A spam gateway can help protect email servers and users from malicious or unwanted emails, such as phishing, malware, or advertising.
A) Serves as a repository for email routing logs. This is not the primary function of a spam gateway.
Email routing logs are records of the path and status of email messages as they travel through the network. Email routing logs can help troubleshoot email delivery issues, but they do not filter or categorize email messages.
B) Blocks unrequested ICMP packets from external networks. This is not the primary function of a spam gateway. ICMP (Internet Control Message Protocol) packets are used to communicate network information, such as errors, requests, or replies. Blocking unrequested ICMP packets from external networks can help prevent network scanning or denial-of-service attacks, but it does not filter or categorize email messages.
D) Mitigates DDoS attacks. This is not the primary function of a spam gateway. DDoS (Distributed Denial-of-Service) attacks are attempts to overwhelm a network or server with a large amount of traffic from multiple sources. Mitigating DDoS attacks can help maintain network availability and performance, but it does not filter or categorize email messages.
Reference: Gateway Spam Filter - SpamTitan Email Security1.

QUESTION 88
A technician is replacing the motherboard of a workstation for a user who runs multiple large applications at the same time. Which of the following motherboard specifications would provide the most significant improvement in performance?

A. Number of DIMM slots
B. Number of HDMI ports
C. Number of PCI slots
D. Number of USB ports

Correct Answer: A
Section:
Explanation:
The correct answer is A. Number of DIMM slots.
The number of DIMM slots on a motherboard determines how much RAM can be installed on the system. RAM is a crucial component for running multiple large applications at the same time, as it allows the CPU to access data faster and avoid swapping to the hard drive. Having more DIMM slots means that more RAM can be added, which can improve the performance and responsiveness of the system.
B) Number of HDMI ports. This is not a correct answer. The number of HDMI ports on a motherboard determines how many monitors can be connected to the system. HDMI ports are used for video and audio output, but they do not affect the performance of the system when running multiple large applications.
C) Number of PCI slots. This is not a correct answer. The number of PCI slots on a motherboard determines how many expansion cards can be installed on the system. PCI slots are used for adding devices such as sound cards, network cards, or graphics cards, but they do not affect the performance of the system when running multiple large applications.
D) Number of USB ports. This is not a correct answer. The number of USB ports on a motherboard determines how many peripherals can be connected to the system. USB ports are used for connecting devices such as keyboards, mice, printers, or external drives, but they do not affect the performance of the system when running multiple large applications.
Reference: Best motherboards 2022: the best motherboards for Intel and AMD - TechRadar1.

QUESTION 89
A user needs to upgrade a PC in order to run the latest 3-D design software. Which of the following components should the user upgrade to best meet this requirement?

A. Motherboard
B. CPU
C. Power supply
D. Graphics card
E. Memory

Correct Answer: D
Section:
Explanation:
The correct answer is D. Graphics card.

A graphics card is a component that handles the processing and rendering of 3D graphics on a PC. A graphics card can significantly improve the performance and quality of 3D design software, as it can handle complex calculations and display high-resolution images faster than the CPU. A graphics card can also support features such as ray tracing, anti-aliasing, and texture mapping, which can enhance the realism and detail of 3D models.

A) Motherboard. This is not a correct answer. A motherboard is a component that connects and communicates with all the other components in a PC. A motherboard does not directly affect the performance or quality of 3D design software, unless it is incompatible or outdated with the other components.

B) CPU. This is not a correct answer. A CPU is a component that executes instructions and calculations for various programs on a PC. A CPU can affect the performance and quality of 3D design software, but not as much as a graphics card. A CPU is more important for tasks such as compiling, encoding, or multitasking, which are not specific to 3D design.

C) Power supply. This is not a correct answer. A power supply is a component that converts AC power from the wall outlet to DC power for the PC components. A power supply does not directly affect the performance or quality of 3D design software, unless it is insufficient or faulty to provide enough power for the other components.

E) Memory. This is not a correct answer. Memory is a component that stores data temporarily for fast access by the CPU and other components. Memory can affect the performance and quality of 3D design software, but not as much as a graphics card. Memory is more important for tasks such as loading, saving, or switching between programs, which are not specific to 3D design.

Reference: System requirements | Substance 3D Designer1, 12 Best Free 3D Modeling Software (For Beginners) 20232, System requirements for Autodesk 3ds Max 20213.

QUESTION 90
Which of the following is considered a connectionless protocol?

A. SSH

B. TCP

C. HTTPS

D. UDP

Correct Answer: D
Section:
Explanation:
The correct answer is D. UDP.

UDP (User Datagram Protocol) is a connectionless protocol that does not establish a connection before sending or receiving data. UDP simply sends datagrams to the destination without checking if the receiver is ready or not. UDP does not guarantee reliable delivery, error correction, or in-order arrival of the data. UDP is faster and more efficient than connection-oriented protocols for applications that do not require reliability, such as streaming audio or video1

A) SSH (Secure Shell) is not a correct answer. SSH is a connection-oriented protocol that uses TCP (Transmission Control Protocol) as its transport layer. SSH establishes a secure and encrypted connection between two network endpoints before exchanging data. SSH provides authentication, confidentiality, and integrity for remote login and command execution2

B) TCP (Transmission Control Protocol) is not a correct answer. TCP is a connection-oriented protocol that establishes a connection before sending or receiving data. TCP ensures reliable delivery, error correction, and in-order arrival of the data. TCP is slower and more complex than connectionless protocols, but it provides more reliability and quality of service for applications that require it, such as web browsing or email1

C) HTTPS (Hypertext Transfer Protocol Secure) is not a correct answer. HTTPS is a connectionoriented protocol that uses TCP as its transport layer and SSL/TLS as its security layer. HTTPS establishes a secure and encrypted connection between a web browser and a web server before exchanging data. HTTPS provides authentication, confidentiality, and integrity for web transactions, such as online banking or shopping1

QUESTION 91
A printer's output is producing solid black sheets without distinct lettering. A technician adjusted multiple settings, but the issue persists. Which of the following parts is most likely causing this issue?

A. Imaging drum

B. Heating element

C. Fuser assembly

D. Feed assembly

Correct Answer: A
Section:
Explanation:
The correct answer is
A) Imaging drum.
An imaging drum is a part of a laser printer that transfers the toner to the paper. The imaging drum is coated with a photosensitive material that reacts to light and creates an electrostatic charge. The charge attracts the toner particles from the cartridge and forms an image on the drum. The image is then transferred to the paper by heat and pressure from the fuser assembly.
If the imaging drum is defective or damaged, it can cause various printing problems, such as solid black pages, blank pages, streaks, spots, or faded prints. A solid black page can occur when the imaging drum is unable to create a charge pattern on its surface, and instead attracts all the toner from the cartridge. This can happen due to a faulty laser unit, a dirty or scratched drum surface, or a worn-out drum.
To fix this issue, the technician should replace the imaging drum with a new one. The imaging drum usually has a limited lifespan and needs to be replaced periodically. The technician should also check the toner cartridge and the fuser assembly for any signs of damage or leakage123

QUESTION 92
A technician is troubleshooting a PC that has been experiencing random system crashes. The technician has already checked the hard drive and the RAM, and both were in good working order.
Which of the following steps should the technician take next to troubleshoot the system crashes?

A. Test the fan speed.

B. Disable the USB ports

C. Replace the PSU

D. Decrease the RAM timings.

Correct Answer: C
Section:
Explanation:
A PSU (power supply unit) is a component that converts the AC power from the wall outlet into DC power that the PC components can use. A faulty or failing PSU can cause random system crashes, as well as other problems such as noise, overheating, or no power at all. A PSU can fail due to various reasons, such as age, dust, power surges, or poor quality.
To troubleshoot a PSU, the technician can use a multimeter to measure the voltage output of the PSU connectors. The voltage should be within the acceptable range of the specifications. For example, the 12V rail should be between 11.4V and 12.6V. If the voltage is too low or too high, the PSU is likely defective and needs to be replaced.
Alternatively, the technician can try swapping the PSU with a known good one and see if the system crashes persist. If the system works fine with a different PSU, then the original PSU is the problem and should be replaced.
The other options are not likely to fix the random system crashes. Testing the fan speed may help to diagnose overheating issues, but it is not related to the PSU. Disabling the USB ports may help to eliminate potential conflicts with USB devices, but it is not related to the PSU. Decreasing the RAM timings may help to improve performance and stability, but it is not related to the PSU.
Reference:
Fix Random PC Crashes: 10 Steps to Identify and Fix Issues
Why Does Windows Crash? The 9 Most Common Reasons

QUESTION 93
Which of the following cables should be used when connecting a cable modem to a SOHO router?

A. FireWire

B. Fiber

C. Ethernet

D. Coaxial

Correct Answer: C
Section:
Explanation:

The correct answer is C. Ethernet.

An Ethernet cable is a type of network cable that is used to connect devices on a local area network (LAN), such as computers, routers, switches, and modems. Ethernet cables have RJ-45 connectors at both ends, which are similar to telephone jacks but larger. Ethernet cables can carry data signals at speeds ranging from 10 Mbps to 10 Gbps, depending on the type and quality of the cable.

A cable modem is a device that connects to a coaxial cable from a cable service provider and provides high-speed internet access. A SOHO router is a small office/home office router that connects to a cable modem or DSL modem and provides network and internet access to multiple devices on a LAN. A SOHO router typically has one WAN port and four LAN ports. The WAN port is used to connect to the cable modem or DSL modem, while the LAN ports are used to connect to computers or other devices on the LAN.

To connect a cable modem to a SOHO router, an Ethernet cable is needed. The Ethernet cable is plugged into the WAN port of the SOHO router and the Ethernet port of the cable modem. This allows the SOHO router to receive an IP address from the cable service provider and share it with the devices on the LAN using network address translation (NAT). The SOHO router also provides firewall and wireless features for the LAN.

The other options are incorrect because they are not suitable for connecting a cable modem to a SOHO router. FireWire is a type of serial bus that is used to connect devices such as digital cameras, external hard drives, and audio interfaces. FireWire cables have different connectors than Ethernet cables and cannot be used for network communication. Fiber is a type of optical cable that uses light signals to transmit data over long distances. Fiber cables have special connectors that are not compatible with Ethernet ports. Coaxial is a type of copper cable that has a central conductor surrounded by an insulating layer and a braided shield. Coaxial cables are used for cable TV and

internet services, but they cannot be directly connected to Ethernet ports without an adapter.

Reference:

CompTIA A+ Certification Exam: Core 1 Objectives (220-1001)

Installing and Configuring a Cable Modem/DSL Router

Cisco 831 Router and SOHO 91 Router Cabling and Setup Quick Start Guide

QUESTION 94

A restaurant calls the support line about its 3in (2.5cm) point-of-sale printer that is only printing fully black receipts. Which of the following should the technician check in order to resolve the issue? (Select two).

A. Power supply

B. Humidity

C. Rollers

D. Fuser

E. Heating element

F. Room temperature

Correct Answer: C, E

Section:

Explanation:

The correct answers are C. Rollers and E. Heating element.

A 3in (2.5cm) point-of-sale printer is a type of thermal printer that uses heat to print receipts on special thermal paper. The printer has a heating element that heats up the paper as it passes through the rollers, creating black marks on the paper where the heat is applied. The heating element and the rollers are two critical components of the thermal printer that can affect the quality of the printout.

If the printer is only printing fully black receipts, it means that the heating element is overheating or malfunctioning, causing the entire paper to turn black. The heating element may need to be replaced or repaired by a technician. Alternatively, the rollers may be dirty or damaged, causing the paper to stick to the heating element and get burned. The rollers may need to be cleaned or replaced by a technician.

The other options are not likely to cause the printer to print fully black receipts. The power supply may affect the printer's performance, but it would not cause the heating element to overheat or the rollers to malfunction. The umidity and room temperature may affect the quality of the thermal paper, but they would not cause the entire paper to turn black. The fuser is a component of a laser printer, not a thermal printer, and it has no effect on the point-of-sale printer.

Reference:

Basic Printer Troubleshooting – Individual Point of Sale

5 Common Issues With Any POS System and How To Fix Them

Printer Troubleshooting | Square Support Center - US

Resolve receipt printer issues and cash drawer will not open - QuickBooks

QUESTION 95
Every time a user tries to print a multipage document, the user is unable to print on both sides of the page. Which of the following settings will most likely resolve this issue?

A. Orientation

B. Duplex

C. Quality

D. Print tray

Correct Answer: B
Section:
Explanation:
The correct answer is B. Duplex.
Duplex printing is the process of printing on both sides of a sheet of paper automatically or manually.
Duplex printing can save paper, reduce clutter, and create professional-looking documents. To print on both sides of the paper, the printer must support duplex printing or the user must manually reinsert the pages to print the second side.
Orientation is the direction in which the paper is printed, either portrait (vertical) or landscape (horizontal). Orientation does not affect the ability to print on both sides of the paper.
Quality is the resolution or sharpness of the printed image, measured in dots per inch (dpi). Quality does not affect the ability to print on both sides of the paper.
Print tray is the part of the printer that holds and feeds the paper into the printer. Print tray does not affect the ability to print on both sides of the paper.
To enable duplex printing on a Windows PC, follow these steps1:
Open the document for printing, then select File > Print.
In Settings, select Manually Print on Both Sides, then Print.
Follow the instructions on the screen to flip and reinsert the pages.
To enable duplex printing on a Mac, follow these steps2:
Open the document for printing, then select File > Print.
In Layout, select Two-Sided, then Long-Edge binding or Short-Edge binding.
Click Print.
Reference:
Print on both sides of the paper (duplex printing) in Word
How to Print Double-Sided on a Windows PC or Mac Computer

QUESTION 96
A technician is using a PAN to connect a group of users on a field project. Which of the following services should the technician activate on the mobile device to share the internet data connection?

A. Tethering

B. Pairing

C. Bluetooth

D. Hotspot

Correct Answer: A
Section:
Explanation:
The correct answer is
A) Tethering.
Tethering is the process of sharing a mobile device's internet data connection with other devices, such as laptops, tablets, or other phones. Tethering can be done by using a Wi-Fi hotspot, a Bluetooth connection, or a USB cable. A Wi-Fi hotspot creates a wireless network that other devices can join, a Bluetooth connection pairs the devices and allows data transfer, and a USB cable connects the devices physically and enables data sharing.
A PAN, or personal area network, is a type of network that connects devices within a short range, usually up to 10 meters. A PAN can be used for various purposes, such as transferring files, printing documents, or

accessing the internet. A PAN can be created by using Bluetooth, Wi-Fi, or infrared technologies.

A technician can use a PAN to connect a group of users on a field project by using tethering on a mobile device. The technician can activate the tethering service on the mobile device and choose the preferred method of sharing the internet data connection. The other devices can then connect to the mobile device and access the internet through it.

The other options are incorrect because they are not services that can share the internet data connection on a mobile device. Pairing is the process of establishing a connection between two Bluetooth devices, but it does not necessarily share the internet data connection. Bluetooth is a technology that can create a PAN and enable tethering, but it is not a service that can be activated on a mobile device. Hotspot is a term that can refer to a Wi-Fi hotspot created by tethering on a mobile device, but it is not a service that can be activated on its own.

Reference:

Share a mobile connection by hotspot or tethering on Android

How to share a mobile connection by tethering or hotspot on Android

How to Share Mobile Internet to PC or Other devices