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Topic Break Down

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QUESTION NO: 1

Which two major components does a Cisco Nexus 1000V Series Switch have? (Choose two.)

A. Virtual Fiber Channel Module

B. Virtual Ethernet Module

C. Virtual Supervisor Module

D. Virtual Memory Controller Module

E. Virtual Network Module

ANSWER: B C

Explanation:

The Cisco Nexus 1000V is basically split into a “brain” and “hands.” The brain is the **Virtual Supervisor Module (VSM)**, which runs the control plane. That’s where you do the configuration, policies, and overall management—similar to the supervisor on a physical Nexus switch.

The hands are the **Virtual Ethernet Modules (VEMs)**. These sit on the hypervisor hosts and handle the actual packet forwarding (the data plane). Each ESXi host (or supported hypervisor) runs a VEM so traffic can be switched locally while still being controlled centrally by the VSM.

The other options don’t fit the Nexus 1000V architecture. For example, there isn’t a “Virtual Memory Controller Module,” and “Virtual Network Module” isn’t one of the two core building blocks Cisco defines for the 1000V.

References: https://www.cisco.com/c/en/us/products/switches/nexus-1000v-switch/index.html and https://www.cisco.com/c/en/us/support/docs/switches/nexus-1000v-switch/116023-technote-n1kv-00.html

QUESTION NO: 2

Which two provide connectivity to Fabric Extenders? (Choose two.)

A. UCS 6300 series

B. UCS B-Series Servers

C. UCS 6400 series

D. UCS S-Series Storage Servers

E. UCS E-Series Servers

ANSWER: A C

Explanation:

Fabric Extenders (FEX) don't operate as standalone switches—they "hang off" a parent device that provides the control plane and the uplink connectivity. In Cisco UCS, that parent role is handled by the Fabric Interconnects. So when the question asks what provides connectivity to Fabric Extenders, it's really pointing you to the UCS Fabric Interconnect families.

The UCS 6300 Series Fabric Interconnects support FEX connectivity (for example, to extend ports out to racks or other endpoints through FEX modules). The UCS 6400 Series Fabric Interconnects also provide that same parent-switch function and can connect to supported FEX models as well. The server options (B-Series, S-Series, E-Series) are endpoints; they connect *through* the UCS fabric but they don't act as the parent device for FEX.

References: https://www.cisco.com/c/en/us/products/servers-unified-computing/ucs-fabric-interconnects/index.html and https://www.cisco.com/c/en/us/products/switches/nexus-2000-series-fabric-extenders/index.html

QUESTION NO: 3

Which method is a TCP/IP-based protocol for establishing and managing connections between IP-based storage devices, hosts, and clients?

A. FCIP

B. iFCP

C. iSCSI

D. FCoE

ANSWER: C

Explanation:

The right answer is **iSCSI**. iSCSI is specifically designed to carry SCSI storage commands over standard TCP/IP networks, which lets servers (initiators) connect to storage targets across an IP network as if the disks were locally attached.

This is exactly what the question is describing: a TCP/IP-based protocol that sets up and manages the connections between hosts/clients and IP storage devices. In practice, iSCSI is commonly used to build SAN-style storage using Ethernet instead of traditional Fibre Channel.

The other options don't fit as well. **FCIP** tunnels Fibre Channel traffic over IP, mainly to link Fibre Channel SANs across distance, not to natively provide IP-based host-to-storage sessions. **iFCP** is a gateway-based approach for Fibre Channel over IP networks, but it's far less common and not the typical "host-to-IP-storage" protocol described here. **FCoE** runs Fibre Channel over Ethernet (not TCP/IP), so it's not TCP/IP-based.

References: https://en.wikipedia.org/wiki/ISCSI and https://www.rfc-editor.org/rfc/rfc3720

QUESTION NO: 4

Which two statements about the Cisco Nexus 5596UP switch are true? (Choose two.)

A. Its power supplies and fan trays are hot-swappable.

B. It supports unified ports.

C. It is offered in a one-rack-unit form factor.

D. It has one expansion slot.

E. It supports up to 96 10G BASE-T ports.

ANSWER: A B

Explanation:

The Nexus 5596UP is built for data centers, so Cisco designed it with field-replaceable parts. That's why the power supplies and fan trays are hot-swappable—you can replace them without shutting the switch down, which helps avoid outages during maintenance.

It also supports "unified ports." In practice, that means the same physical ports can be configured for different roles (like Ethernet or Fibre Channel over Ethernet), giving you flexibility depending on whether you're building a traditional Ethernet network or converging storage and LAN traffic.

The other choices don't line up with the 5596UP's hardware. It's a 2RU switch (not 1RU), and it uses expansion modules rather than having only a single expansion slot. Also, "up to 96 10GBASE-T ports" isn't a standard spec for the 5596UP—its 96 ports are typically SFP+ (10Gb) with unified-port capability, not 10GBASE-T copper.

References: https://www.cisco.com/c/en/us/products/collateral/switches/nexus-5000-series-switches/data_sheet_c78-618603.html and https://www.cisco.com/c/en/us/products/switches/nexus-5596up-switch/index.html

QUESTION NO: 5

During the auto-sync firmware upgrade process, what should be your initial input entered once the Fabric Interconnect boots up?

A. console

B. gui

C. upgrade firmware

D. auto-sync

ANSWER: A

Explanation:

When a Cisco UCS Fabric Interconnect boots after an auto-sync firmware event, the first thing you normally do is connect through the serial/console and respond to the initial prompts you see there. In other words, your "initial input" is done from the console session, not from the GUI, and you don't type a command like *upgrade firmware* or *auto-sync* as a first step.

The GUI (UCS Manager) may not even be available yet during early boot or while the system is finishing synchronization tasks. The console gives you direct access to the boot messages and any required confirmations, which is why it's the expected first interaction point during recovery/upgrade scenarios.

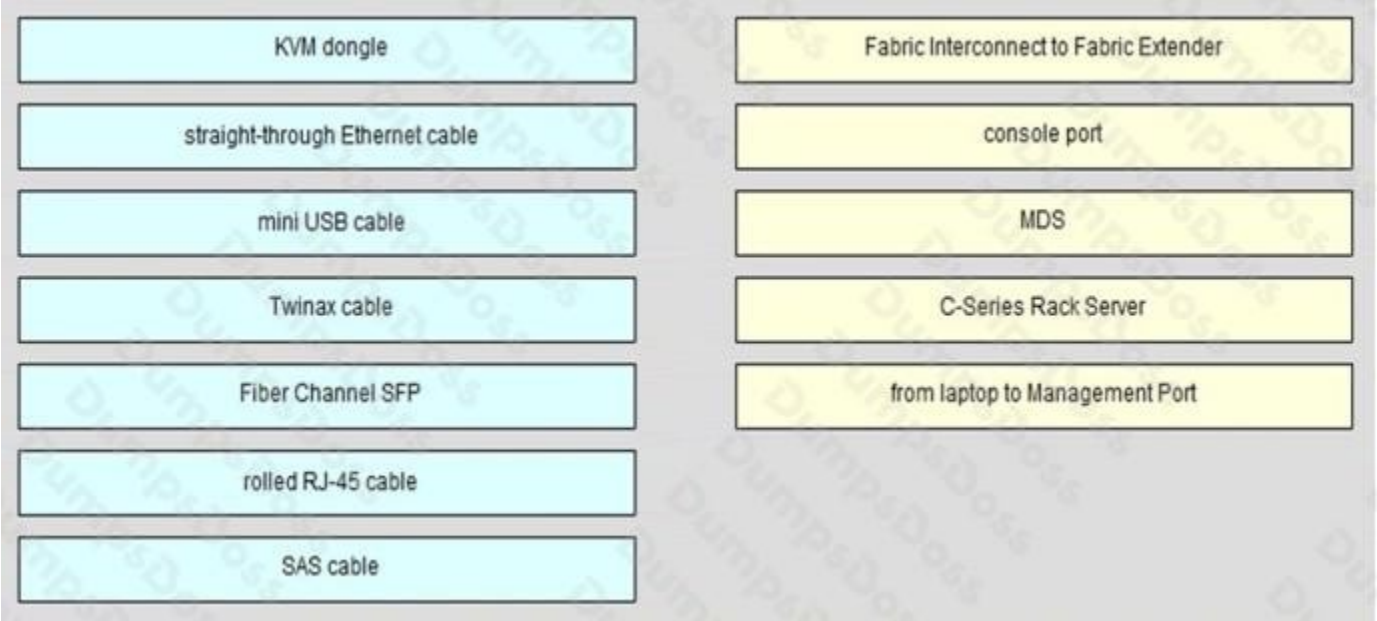
Reference: Cisco UCS Fabric Interconnect documentation and access methods, including console access: https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-6200-series-fabric-interconnects/series.html

QUESTION NO: 6 - (DRAG DROP)

DRAG DROP

Drag the cable or connector on the left to the correct interface on the right.

Select and Place:



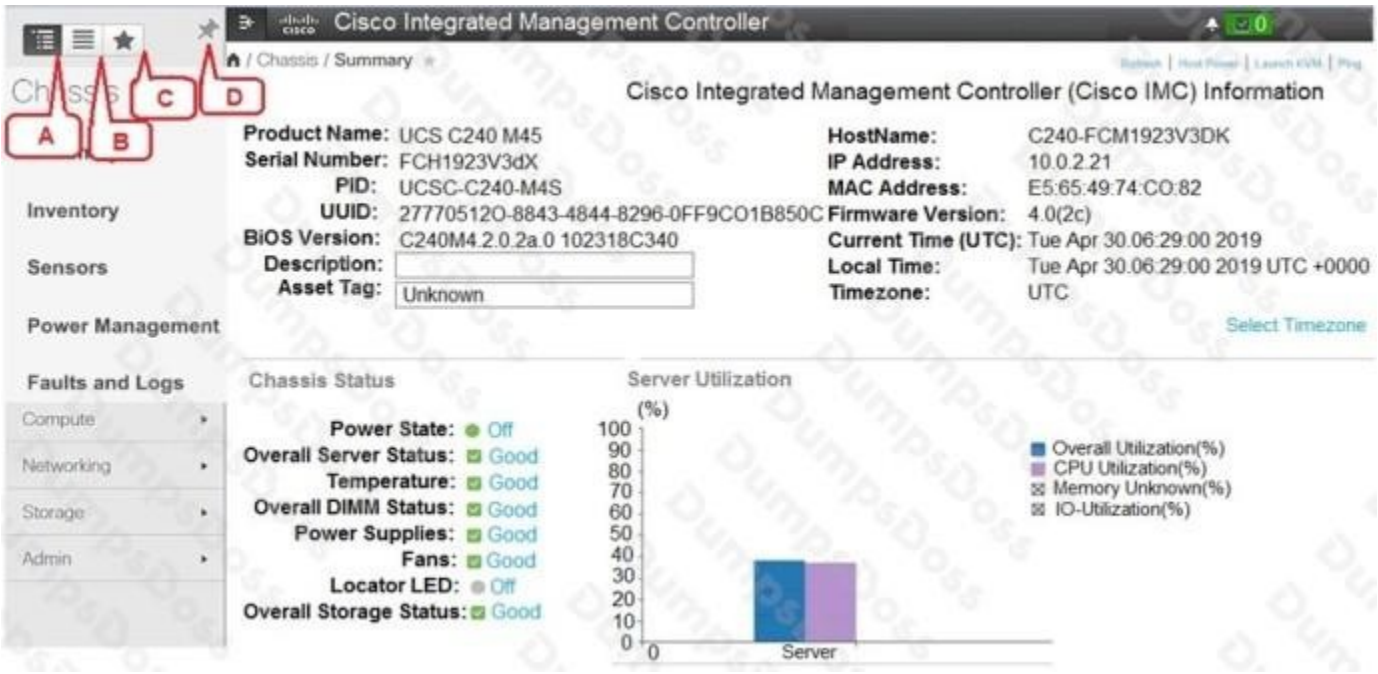
ANSWER:

Explanation:

The placements shown are correct. UCS Fabric Interconnect to Fabric Extender links are typically done with 10Gb Twinax/DAC cables, the console port uses a Cisco rolled (rollover) RJ-45 console cable, MDS uses Fibre Channel optics (FC SFPs), a C-Series rack server can use a KVM dongle for local KVM access, and a laptop connects to a management port with a standard straight-through Ethernet cable.

References: Cisco rollover (console) cable overview, Cisco MDS (Fibre Channel switching), Cisco UCS Fabric Extenders

QUESTION NO: 7



Refer to the exhibit. Which item does C represent?

A. Pin icon (prevents Navigation pane from sliding)

B. Icon to view the Navigation pane

C. Favorite Icon (make any specific work pane in the application as your favorite)

D. Index Icon (view listing in alphabetical order)

ANSWER: C

Explanation:

In the Cisco UCS C-Series HTML GUI, the icon marked as **C** is the **Favorites** (star) icon. It's used to bookmark a specific page or work pane so you can jump back to it quickly later, instead of digging through menus every time.

This is different from the pin icon (which locks the navigation pane open), and it's not the navigation toggle itself. The Favorites icon is specifically about saving commonly used screens for faster access during day-to-day tasks like checking inventory, monitoring status, or revisiting a configuration page.

Reference: https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/c/sw/gui/config/guide/4_1/b_Cisco_UCS_C-series_GUI_Configuration_Guide_41/b_Cisco_UCS_Cseries_GUI_Configuration_Guide_41_chapter_01.html

QUESTION NO: 8

Refer to the exhibit.

Which three options are features of the Cisco UCS 6248UP Fabric Interconnect front panel? (Choose three.)

A. Console port

B. FCoE port

C. 10 Gb/s port

D. Fan module

E. USB port

ANSWER: A D E

Explanation:

On the Cisco UCS 6248UP Fabric Interconnect, the front panel includes the basic “hands-on” management and service items you’d expect to see right away. The **console port** is there for local CLI access when you’re doing initial setup or troubleshooting and don’t have remote access available.

You also get a **USB port** on the front, which is commonly used for tasks like loading software images or collecting logs during maintenance. It’s a simple but handy feature when you’re working directly at the rack.

Finally, the **fan module** is a visible, serviceable front-panel component. On these fabric interconnects, fans are designed to be field-replaceable, so you can swap a failed module without tearing the whole unit apart.

The other choices aren’t as “front-panel feature” specific in the way the question is asking. For example, FCoE is a capability of the unified ports, but it’s not typically called out as a distinct front-panel feature by itself.

References: https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-6248up-48-port-fabric-interconnect/model.html and https://www.cisco.com/c/en/us/products/servers-unified-computing/ucs-6200-series-fabric-interconnects/index.html

QUESTION NO: 9

Which two statements about PCIe are true? (Choose two.)

A. The PCIe supports native hot-swap functionality.

B. You can install a PCI Express x16 adapter into an x4 slot.

C. The PCIe standard is a bus-based system in which all the devices share the same bidirectional, 32-bit or 64-bit, parallel signal path.

D. The PCIe 4.0 standard doubles the transfer rate compared to PCIe 5.0.

E. A link that is composed of four lanes is called an x4 link.

ANSWER: A E

Explanation:

PCIe uses “lanes” to build up link widths, so the naming is pretty literal. If a connection has four lanes, it’s called an x4 link. Each lane is its own point-to-point path, and combining lanes increases total bandwidth.

PCIe also supports hot-plug/hot-swap capability as part of the PCI Express specification (it depends on the platform and hardware support, but the standard includes it). That’s why you’ll see PCIe hot-plug features in servers and some enterprise systems.

The other options don’t hold up: PCIe is not a shared parallel bus like old PCI; it’s a high-speed serial, point-to-point architecture. And PCIe 4.0 definitely does not double PCIe 5.0—PCIe 5.0 doubles PCIe 4.0. Also, physically fitting an x16 card into an x4 slot generally won’t work unless the slot is open-ended or designed for it.

References: https://en.wikipedia.org/wiki/PCI_Express and https://pcisig.com/specifications/pciexpress

QUESTION NO: 10

Which method does FCIP use to enable connectivity of geographically distributed Fibre Channel SANs over IP?

A. routing

B. tunneling

C. handshaking

D. transporting

ANSWER: B

Explanation:

FCIP (Fibre Channel over IP) works by **tunneling** Fibre Channel traffic through an IP network. In plain terms, it takes native FC frames, wraps (encapsulates) them inside TCP/IP packets, and sends them across the WAN so two separate SAN “islands” can talk to each other over distance.

This is different from routing. Fibre Channel itself isn’t being routed across IP like normal IP packets; instead, the FC frames are carried inside an IP “tunnel” between FCIP gateways/ports. When the traffic reaches the far end, it’s unwrapped and put back onto the remote Fibre Channel fabric as regular FC traffic.

If you want to read it straight from Cisco's side, check Cisco's FCIP overview here: https://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/sw/8x/config/guides/fcip/b_MDS9000_FCIP_Configuration_Guide_8x.html

QUESTION NO: 11

Which three tools are necessary to console into a Cisco UCS C-Series Rack-Mount Server? (Choose three.)

A. Cisco DB-9-to-RJ-45 console cable

B. laptop

C. monitor

D. keyboard

E. KVM dongle

F. USB serial adapter

ANSWER: C D E

Explanation:

For a UCS C-Series rack server, "console in" usually means getting local KVM access to the server (video + keyboard/mouse) through the front-panel KVM connector. To do that, you need a **KVM dongle** (Cisco's breakout cable) so the single front KVM port can fan out into the standard connectors.

Once you have the dongle, you also need a **monitor** for video output and a **keyboard** to interact with the system BIOS/boot process and the OS console. Those three items together give you the full local console experience.

The Cisco DB-9-to-RJ-45 console cable and a USB serial adapter are typically used for network devices (switches/routers) via serial console, not for the local KVM console on a C-Series server. A laptop can be handy, but it's not required if you already have a monitor and keyboard connected through the KVM dongle.

References: https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-rack-servers/products-installation-guides-list.html, https://en.wikipedia.org/wiki/KVM_switch

QUESTION NO: 12

Which supervisor module is supported by a Cisco Nexus 7700 Series Switch?

A. first-generation supervisor module

B. second-generation supervisor module (Sup2)

C. second-generation supervisor enhanced module (Sup2E)

D. third-generation supervisor enhanced module (Sup3E)

ANSWER: C

Explanation:

The Cisco Nexus 7700 Series uses the M-series supervisor family, and the commonly supported supervisor for this platform is the second-generation supervisor enhanced module, Sup2E. In practice, when you're dealing with Nexus 7700 chassis, Sup2E is the supervisor you'll see referenced for control-plane and system management support.

The other options don't line up with the Nexus 7700 hardware family naming and support matrix. "First-generation" and "Sup2" are not the right fit here, and "Sup3E" isn't a supported supervisor module for the Nexus 7700 the way Sup2E is.

You can cross-check this in Cisco's Nexus 7700 documentation and data sheets, which call out the supported supervisor modules for the platform. A good starting point is Cisco's official Nexus 7700 Series documentation page: https://www.cisco.com/c/en/us/support/switches/nexus-7700-series-switches/series.html

QUESTION NO: 13

Which command-line interface mode is best described by this prompt? Switch (config) #

A. Local management mode

B. EXEC mode

C. Boot mode

D. Global configuration command mode

ANSWER: D

Explanation:

The prompt **Switch(config)#** is Cisco's way of telling you that you're in **global configuration mode**. You usually get here by typing `configure terminal` from privileged EXEC mode (`Switch#`). In this mode, you can make changes that affect the whole device, like setting hostnames, enabling routing features, or jumping into more specific configuration areas.

A quick way to remember it: when you see `(config)` in parentheses, you're configuring something. If it changes to something like `(config-if)`, then you're configuring a specific interface. But plain `(config)` means global settings for the switch overall.

References: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/fundamentals/configuration/xe-3s/fundamentals-xe-3s-book/cf-cli-basics.html and https://www.ciscopress.com/articles/article.asp?p=3089357