

Exam : IBM 000-077

**Title : xSeries Technical High
Performance Servers V2**

Update : Demo

1.A 2-way interleaved DDR configuration and a 4-way interleaved SDRAM configuration will produce which of the following?

- A.They will have the same memory bandwidth.
- B.2-way will provide higher memory bandwidth than 4-way.
- C.4-way will provide higher memory bandwidth than 2-way.
- D.4-way will provide higher memory bandwidth but only on an x445.

Correct:A

2.A 4-way x445 server with 2GB of memory running Windows 2003 Server with Exchange 2003 is performing poorly. Users are complaining of slow response times when accessing their email. Which subsystem should be checked first as a potential bottleneck?

- A.Processors
- B.Memory subsystem
- C.Storage subsystem
- D.Network connectivity

Correct:B

3.Which of the following x366 8GB memory configurations will produce the best performance?

- A.One memory card with four 2GB DIMMs
- B.Two memory cards with four 2GB DIMMs
- C.Two memory cards with eight 1GB DIMMs
- D.Four memory cards with eight 1GB DIMMs

Correct:D

4.A customer needs a 2-way Xeon system today but plans on expanding to a 4-way early next year. The customer is looking to limit the initial costs as much as possible but may not be as budget constrained next year. Which of the following is the best solution to all the customer's needs?

- A.An x445 with 2 Xeon DP processors. Plan on adding 2 more Xeon DP processors next year.
- B.An x445 with 2 Xeon MP processors. Plan on adding 2 more Xeon MP processors next year.
- C.An x366 with 2 Xeon MP processors. Plan on adding 2 more Xeon MP processors next year.
- D.An x366 with 2 Xeon DP processors. Plan on adding 2 more Xeon DP processors next year.

Correct:C

5.While explaining to a customer the fault tolerant benefits of x445 they ask what happens if they implement memory mirroring and a DIMM fails in the SMP expansion module. Which of the following is the most appropriate response?

- A.The DIMM is taken off line, and fault tolerance is available on the other DIMMs only.
- B.The memory bank is taken offline and rebuilt with the online hot spare and then brought back on line.
- C.The memory bank containing the failed DIMM is taken off line, and the system is no longer fault tolerant until replaced.
- D.The DIMM is taken offline, and the online hot spare is initiated and the system remains fault tolerant.

Correct:C

6.A consultant has been asked to do a performance analysis on a database server. Which subsystem should the consultant first analyze and why?

- A.CPU, because the database replication process requires a considerable amount of CPU time
- B.Memory, because the buffer cache requires a large amount of memory to maintain the data in system memory

C.Disk, because it is important to configure a sufficient number of disks to match the CPU processing power

D.Network, because the data returned to the client from the server can be a large subset of the total database

Correct:B

7.While upgrading an existing x445 with a second SMP expansion module and four processors, a technician notices the SMP connector cables are missing on the back, so the technician connects the cables. Upon powering up, the technician notices the upper SMP expansion module is disabled. Which of the following is the most likely cause of the problem?

A.The system requires 220V power to enable the upper SMP expansion module.

B.The technician cabled the SMP expansions wrong.

C.The Xcel4 cache needs to be reset in the BIOS because of the addition of the second SMP expansion module.

D.If no hardware licenses keys have been purchased for the processors in the upper SMP expansion module, it will not be activated.

Correct:B

8.A customer with two x445 servers wants to have two NetXtreme Dual Port Gigabit Ethernet adapters installed in each server. What is the minimally supported configuration that will allow maximum throughput?

A.Install the two cards in slots 5 and 6 in the x445.

B.Install the two cards in slots 3 and 5 in the x445 make sure slots 4 and 6 are not occupied.

C.Install an RXE-100 on each x445 and install one card in the x445 and one card in an RXE-100 on each system.

D.Connect an RXE-100 between the two x445s and install one card in each x445 and one card in each side of the RXE-100.

Correct:A

9.Which of the following features of Active Memory perform a regular check and cleanup of the status of DIMMs?

A.Chipkill and Memory ProteXion

B.Chipkill and memory mirroring

C.Memory ProteXion and memory scrubbing

D.Hot spare memory and memory scrubbing

Correct:C

10.A customer needs a new Microsoft Windows 2003 Server. They are running an application that requires substantial memory. They would like a rack mountable system, which will support four Xeon processors with 2MB of L3 cache. Which of the following is the minimum configuration to satisfy the customer's requirements?

A.x445 with four Xeon MP processors and 8GB of memory

B.x445 with four Xeon MP processors and 16GB of memory in a single SMP module

C.x445 with four Xeon DP processors and 16GB of memory in a single SMP module

D.x445 with two SMP modules each containing two Xeon DP processors and 8GB of memory

Correct:A

11.An x445 can sustain up to two memory chip failures per memory bank, and in an 8-way with

four memory banks, up to eight memory chip failures can be sustained. Which combination of EXA features provides this functionality?

- A.ECC with Chipkill
- B.ECC with Memory Mirroring
- C.Chipkill with Memory ProteXion
- D.Memory ProteXion with Hot Spare Memory

Correct:C

12.A server has two PCI-X buses with four Active PCI-X slots. Slots 1 and 2 are on the first PCI-X bus (100MHz) and slots 3 and 4 are on the second PCI-X bus (133MHz). The customer requires you to install adapter A and adapter B on day one. After the server has been installed and configured, the server must be running 24 by 7 with no downtime. Three months later, adapter C needs to be hot added. All the adapters are 64-bit and capable of speeds up to 133MHz. The customer's priority is to have no downtime, and performance is secondary. Based on the information provided, into which slots should adapters A and B be installed in and later into which slot would adapter C be hot-added?

- A.Adapter A in slot 1, adapter B in slot 4 and hot-add adapter C in slot 3
- B.Adapter A in slot 1, adapter B in slot 3 and hot-add adapter C in slot 2
- C.Adapter A in slot 2, adapter B in slot 4 and hot-add adapter C in slot 3
- D.Adapter A in slot 3, adapter B in slot 1 and hot-add adapter C in slot 4

Correct:B

13.A customer wants to purchase a Windows 2003 DataCenter Edition system to run an application. The application benefits the most by caching a vast amount of data in RAM so the user does not have to wait for disk I/O while editing. Processing is second in importance. If cost is not an issue, what machine will have the best performance?

- A.Use an x360 running 4 MP processors with 16GB of RAM
- B.Use an x360 running 4 DP processors with 16GB of RAM
- C.Use an x445 running 2 DP processors with 64GB of RAM
- D.Use an x445 running 4 DP processors with 64GB of RAM

Correct:D

14.The statistics for a poorly performing x366 system are as follows: Processor: 90% for 5 second increments Memory page faults: 20/second average over 15 minutes Disk: disk time 1% Which of the following will provide the greatest performance improvement?

- A.Add memory
- B.Add a processor
- C.Add a faster disk subsystem
- D.Exchange the processor with a faster processor

Correct:D

15.A customer is considering replacement of twenty older 4U and 6U rack-based servers with one IBM x366 Server running VMWare ESX attached to one DS4300. Which of the following represents a reduction in Total Cost of Ownership (TCO) for the customer?

- A.Reduction in operating system software licensing and application costs
- B.Reduction in floor space and hardware cost saving
- C.VMWare is licensed per system so no extra charge for SMP support

D.No single point of failure, reducing downtime

Correct:B

16.A customer is installing a new xSeries server into a Token-Ring environment. Where would the customer find the latest supported Token-Ring PCI adaptors for that server?

- A.IBM ServerProven hardware website
- B.IEEE Proven website
- C.IBM PartnerWorld website
- D.3Com Support website

Correct:A

17.A customer wants to implement a clustered database solution on their existing x445 servers. A minimum of four nodes must participate in the cluster, and the customer wishes to use open standards. Which of the following best satisfies their requirements?

- A.Novell NetWare Cluster Services
- B.Red Hat Enterprise Linux Cluster Suite
- C.Microsoft Windows 2003 Server with MSCS
- D.Microsoft Windows 2003 Enterprise Edition

Correct:B

18.A customer has recently purchased some IBM x445 servers running Red Hat Enterprise AS 3 and wants to connect them to their existing EMC Clarion SAN controller. Which of the following steps must be taken in order to validate the solution?

- A.Download the latest drivers from EMC for Red Hat Advanced Server.
- B.Ensure that the EMC storage server is configured properly and has the latest firmware levels.
- C.Verify the equipment is on the ServerProven list and complete a Solution Assurance Review (SAR).
- D.Ensure that the systems are connected to the EMC SAN controller.

Correct:C

19.A customer with an EMC Clariion CX700 storage installation is considering a new IBM TotalStorage DS4500 solution. Which of the following is an advantage of the IBM DS4500 solution?

- A.Host port speed of 2Gb/s
- B.Three-year hardware warranty
- C.Heterogeneous Operating System support
- D.Storage Manager software comes standard with DS4000 controllers

Correct:D

20.A customer needs a new database server. Their third-party application requires Microsoft SQL Server. They have 100 users who will login to the network and store their data files on the network server. They will also require the server to be an email server and to deploy a central antivirus solution. Which of the following network operating systems would satisfy these requirements?

- A.SuSE Linux Enterprise 9
- B.Red Hat Linux Advanced Server 3
- C.Microsoft Windows 2003 Server Web Edition
- D.Microsoft Windows 2003 Server Standard Edition

Correct:D

21.An HP customer is looking for an enterprise type of Intel-based server for a mission-critical database server. What are the TWO major differentiators of an x445 over the HP DL740/DL760?

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- A.Hot-plug PCI-X
 - B.Remote I/O expansion
 - C.Maximum 64GB RAM for 8-way
 - D.Onboard SCSI RAID controller
 - E.Ability to expand up to 16-way SMP

Correct: B E

22. A community hospital has expressed interest in consolidating their legacy Intel servers onto virtual machines with VMWare ESX. They will migrate most of their 2-way processor servers to two x366's and have confirmed they would like to use a SAN. The IBM specialist visited their datacenter to verify their environment and met with the Systems Admin. Which of the following questions is most critical to verify the solution can be implemented?

- A. Is there a need for direct attached SCSI?
- B. Do any of the legacy servers require access to a parallel port or other I/O device not supported by ESX?
- C. Will Flashcopy be required to duplicate VMs?
- D. How much do they expect their storage to grow within the next two years?

Correct: B

23. A company wants to replace their Dell servers and implement x445 servers with a Storage Area Network (SAN). They will add an IBM TotalStorage DS4500 and EXP710s for their storage requirements. The customer's goal is to reduce the Total Cost of Ownership (TCO) of their current environment. Which of the following factors provide the greatest advantage?

- A. The DS4500 with DS4000 Storage Manager provides efficient storage utilization.
- B. The DS4500 and x445 provide disaster recovery capability.
- C. The IBM TotalStorage DS4500 includes virtualization of the disk storage.
- D. Storage partitioning and Remote Volume Mirroring are standard features with the DS4500 product.

Correct: A

24. A customer is running a number of non-IBM servers purchased two years ago and has settled on one of the new IBM xSeries servers as a migration path. From the following options, which is the preferred migration path?

- A. Copy the image of the non-IBM servers and copy that image to the IBM servers, then reboot the IBM servers.
- B. Copy the image from the non-IBM servers with RDM and install them with IBM Director to the new IBM servers. Reboot the IBM servers.
- C. Install a fresh operating system using ServerGuide, and then install the applications and copy the data from the old servers.
- D. Install a fresh operating system on the IBM servers and then run ServerGuide on the IBM servers to migrate the applications and data to the IBM servers.

Correct: C

25. An existing IBM customer has some iSeries servers in their environment. The customer is adding an x366 server with an RSA-II installed for their Microsoft Client/Server applications. The customer wants to consolidate the storage and centralize the backup of the iSeries and xSeries platforms. Which of the following will accomplish this?

- A. Share the data over the Ethernet LAN.
- B. Install the IXA Adapter in the iSeries server.

C. Install the IXA Adapter in the xSeries server.

D. Attach both servers to an IXS switch.

Correct: C

26. A customer uses an IBM xSeries x366 for their network server. They experienced downtime when the NIC failed earlier this year. Their Novell 6.5 server needs to be accessible all the time at the highest speed possible. Slots are available where network adapters can still be added. High availability is the primary requirement, but increased network bandwidth on the server is also required. Which of the following is the most cost-effective solution to satisfy all of the customer's requirements?

A. Upgrade the network switches to 10Gb speed.

B. Install a dual port gigabit Ethernet adapter and configure adapter load balancing teaming with the onboard adapters.

C. Install one extra adapter to team with the internal adapter and configure adapter failover.

D. Install two additional NICs and configure adapter load balancing teaming with the onboard adapters.

Correct: B

27. A customer wants to deploy VMWare ESX on four-way Intel systems. They are considering IBM and Dell. Which of the following is an advantage IBM has over the competition?

A. IBM provides optional Remote Technical Support for hardware, NOS, and VMWare.

B. The IBM xSeries EXA chipset has extensions to provide better efficiency for the VMFS file system.

C. IBM servers can address larger LUNs on SAN storage than Dell.

D. IBM provided VMWare with the majority of their internal drivers for ESX.

Correct: A

28. A customer has just purchased six x346 servers running Windows 2003 Web Edition. They are expecting to add six additional x346's in three months. They have a requirement to automatically deploy the current server image upon the new servers. What TWO actions are required to complete this task?

A. Ensure Director Agent is installed on the new servers.

B. Ensure a DHCP Server is installed and configured in the environment.

C. Ensure Server Plus Pack option has been installed and configured.

D. Ensure Software Distribution has been installed on the IBM Director Server and an image has been created.

E. Ensure Remote Deployment Manager has been installed on the IBM Director Server and an image has been created.

Correct: B E

29. The Chief Information Officer (CIO) is preparing a briefing about the reliability of their server environment. There is a need to create a report about which systems had unplanned system outages and how often they occurred. What IBM Director tool can be used to create the report?

A. Capacity Manager

B. Process Management tool

C. System Availability tool

D. System Reporting tool

Correct: C

30. A customer's small heterogeneous enterprise has grown over time to more than 500 client

systems, and the administrator cannot add new servers to the management database. Which of the following is the most likely source of the problem?

- A.The management server has reached its size limitation.
- B.Additional agent licenses must be purchased.
- C.The CPU and Memory requirements need to be upgraded.
- D.The default JET database has reached its size limitation.

Correct:D