



**Exam Code:** 000-077

**Exam Name:** xSeries Technical High Performance  
Servers V2

**Vendor:** IBM

**Version:** DEMO

## Part: A

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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: 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 Answers: D**