

**Exam Code:** 000-086

**Exam Name:** System x High Performance Servers

Technical Support V4

**Vendor:** IBM

**Version:** DEMO

## **Part: A**

1: A small bio-technical company is interested in implementing a 32-node Linux cluster. They have developed their own software that allows all of the nodes to work on the same problem at the same time. The application requires messages to be passed between the nodes. Each node will require access to a shared storage pool of around 500GB. Which of the following questions will identify the inter-process communication (IPC) networking requirements?

- A. Is the network capable of using 4x or 12x Infiniband?
- B. Will rsh be enabled for remote process initiation?
- C. What are the data transfer requirements for inter-node message passing?
- D. What type of data is being sent across the inter-process communication network?

**Correct Answers: C**

2: A finance customer is planning to implement a new x445 in their datacenter. Which of the following should the customer prepare prior to the implementation to ensure a trouble free installation?

- A. Install the exhaust fan on top of the IBM NetBAY 42 Enterprise rack for extra cooling
- B. Ensure a 260V power source for the x445 and BladeCenter is available for fully redundant power
- C. Ensure a 220v power source for the x445 is available for fully redundant power
- D. Install a raised floor for more efficient cooling

**Correct Answers: C**

3: A retail customer needs to install a database on a server. Which of the following statements describes how to modify the RAID configuration for optimal performance?

- A. Place both the database and transaction log on two logical drives in one RAID-10 array
- B. Place both the database and transaction log on two logical drives in one RAID-1E array.
- C. Place the database on a RAID-1E array and place the transaction log on a separate RAID-5 array
- D. Place the database on a RAID-5 array and place the transaction log on a separate RAID-1 array

**Correct Answers: D**

4: A construction customer is looking for the lowest-cost system that to use for existing 32-bit applications and 64-bit test applications. The customer is considering the IBM, HP, or Dell-comparable models. Which of the following is the primary advantage of the x3850 over the competition?

- A. Onboard RAID capable
- B. Onboard systems management
- C. Enterprise X-Architecture (EXA)
- D. Integrated Dual Gigabit Ethernet

**Correct Answers: C**

5: Which of the following are functions of the Xcel4v cache?

- A. Memory mirroring

- B. Approximately 5% boost in performance
- C. Reduce traffic on the front side bus in a single node server
- D. Provides a 2:1 compression ratio for data in cache

**Correct Answers: C**

6: A finance company wants a solution to consolidate their storage using the DS4000 series and implement a disaster recovery solution across two data centers linked by fibre to duplicate the production environment. The customer requires a solution with the least amount of system administration. Which configuration would provide the best solution?

- A. Implement one DS4800 at each location connected to the fibre link and use Remote Volume Mirror (RVM).
- B. Implement a DS4800 at each location using FlashCopy option and use host based replication to synchronize the sites.
- C. Implement a switched fabric using redundant SAN switches with a DS4800 using RVM option at each location.
- D. Implement a switched fabric using SAN switches connected via ISL with a DS4800 using RVM option at each location.

**Correct Answers: D**

7: A retail customer wants to deploy VMware vSphere 4 on a scalable Intel system. They are considering IBM and Dell. Which of the following is an advantage IBM has over the competition?

- A. IBM provides the ability to expand up to 4 nodes.
- B. The IBM Modular Systems 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 Answers: A**

8: A large research hospital shares large medical image files across widely separated locations, and these locations are interconnected by single 1.5Mb/second communication lines. A consultant has been asked to provide a solution that will allow back-ups to be centralized in one location and improve data recovery times. Which of the following questions should the consultant ask first to determine the best solution?

- A. What format are the images?
- B. Can the communication lines be upgraded to a higher service level economically?
- C. What are the current acceptable windows for back up and restore?
- D. Are the locations within line-of-sight to enable wireless communication?

**Correct Answers: C**

9: A banking customer is experiencing a performance bottleneck in a disk subsystem. The server is performing sequential I/O with a small number of users requesting large files. Which of the following would most likely resolve the bottleneck?

- A. Decrease seek translation
- B. Increase seek translation

- C.Decrease rotational latency
- D.Increase rotational latency

**Correct Answers: B**

10: An application vendor wants to choose a fault tolerant platform for their new application. The application benefits from multiple processors and has been tested on Red Hat. Which of the following is the best procedure to determine the memory requirements for the application?

- A.The application should be tested and baselines should be measured with simulated user loads.
- B.The application should be tested with the minimum amount of memory then increase the memory in increments until an acceptable response is achieved.
- C.The application should be tested with differing amounts of memory and the fastest response time is reached it should be used as the acceptable configuration.
- D.The application should be tested with the maximum amount of memory then decrease the memory in increments until an acceptable price/performance ratio is reached.

**Correct Answers: A**

11: A construction company wants a solution to consolidate their storage using the DS4000 series and implement a disaster recovery solution across two data centers linked by fibre to duplicate the production environment. The customer requires a solution with the least amount of system administration. Which configuration would provide the best solution?

- A.Use write-back cache with battery backup enabled
- B.Use write-through cache with battery backup enabled
- C.Use read-back cache with battery backup enabled
- D.Use read-through cache with battery backup enabled

**Correct Answers: A**

12: How many memory expansion cards should be installed to maximize the memory performance of the x3850 M2 or x3950 M2?

- A.8
- B.2
- C.6
- D.4

**Correct Answers: A**

13: A construction customer's support technician finished installing their new x3850 server running Windows 2003 Enterprise Server and the IBM Systems Director agent. The customer applied the latest BIOS and firmware drivers available on the Web for the system. The problem is that the x3850 runs for a few minutes and then reboots itself. Which of the following should be checked first?

- A.Ensure the Watchdog timers on the RSA-II are disabled.
- B.Disable Hyperthreading feature on the machine.

C.Configure the box with RAID-1 and not RAID-5.

D.Replace the Windows NTLDR file on the root partition from another copy of the Windows OS files.

**Correct Answers: A**

14: A manufacturing customer has a small SAN with both LINUX and Windows servers attached to a DS3400 storage server through redundant fabric. Which of the following is the most important consideration for proper function?

A.Utilization of the interswitch links between the redundant switches

B.Enablement of multi-OS Storage Partitioning feature on DS3400

C.50u multi-mode fiber optic cable for 4Gb operation

D.RAID level of the array on the DS3400

**Correct Answers: B**

15: A 2-node x3950 M2 can sustain up to two memory chip failures per memory bank. In a 4 socket system with four memory expansion cards, up to eight memory chip failures can be sustained. Which combination of XA-64e features provides this functionality?

A.ECC with Chipkill

B.ECC with Memory Mirroring

C.Memory ProteXion with Chipkill

D.Hot Spare Memory with Memory ProteXion

**Correct Answers: C**

16: A customer plugs one PCI-X 133MHz card into slot 5 of a x3755 and slot 6 is empty. What will be the speed of the card in slot 6?

A.133MHz

B.100MHz

C.166MHz

D.66MHz

**Correct Answers: B**

17: A customer has a large facility that has its offices at one end and a manufacturing floor at the other. The company is looking to implement new equipment that requires access to the company's SAN that is over 2.4 kilometers away. Which of the following solutions will satisfy this requirement?

A.Install a longwave SFP in the office SAN switch and string a multimode fibre from the office to the manufacturing floor.

B.Install a longwave SFP in the office SAN switch and string a singlemode fibre from the office to the manufacturing floor.

C.Install a shortwave SFP in the office SAN switch and string a multimode fibre from the office to the manufacturing floor.

D.Install a shortwave SFP in the office SAN switch and string a singlemode fibre from the office to the manufacturing floor.

**Correct Answers: B**

18: A retail company needs to connect seven of their Windows-based servers to a DS4700 storage server. The DS4700 only has two host-side connections, and each server has two HBAs. Which of the following is the lowest cost solution to provide no single points of failure?

- A. Implement two 8-port switches design with ISLs
- B. Implement two 16-port switches design with ISLs
- C. Implement two 8-port switches design without ISLs
- D. Implement two 16-port switches design without ISLs

**Correct Answers: C**

19: An 3950 M2 can withstand up to two failed memory chips per memory port. In addition, the customer requires protection for a third memory chip failure on that port. Which XA-64e feature will provide this extra level of protection?

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

**Correct Answers: B**

20: A mechanical contractor is deploying a custom application written to take advantage of multithreading features and run in a Windows environment. The customer has read about iDataPlex, BladeCenter, and System x servers. The customer wants to know which processor family will run the application most efficiently. Which of the following questions will provide the required information?

- A. What is the application's maximum processor scaling capability?
- B. Will the application run faster with Microsoft OLTP technology?
- C. Will the application benefit from larger disk cache and swap space?
- D. Can the application use Hot Swap Processor, Memory, and PCI-X technology?

**Correct Answers: A**