Exam : **HH0-440**

Title : Storage Architect - Performance & Virtualization

Version : Demo

1. A customer runs two geographical dispersed data centers and plans to merge both data centers' SANs. Which three should be considered when planning the ISL installation and configuration? (Choose three.)

A. distance

B. ISL trunk setup/configuration

C. estimated throughput

D. fabric trunk setup/configuration

E. buffer credits

Answer: ABC

2. Which HDS product is used to define and report Logical Group configurations?

A. Hitachi Tuning Manager

B. Hitachi Device Manager

C. Hitachi Tiered Storage Manager

D. Hitachi Storage Services Manager

Answer: B

3. When planning for capacity growth and performance for a new application, which three metrics are necessary to determine the required back-end storage configuration? (Choose three.)

A. anticipated read/write IOPS

B. cache read hit ratios

C. queue depths

D. transfer rates

E. IOPS per physical disk

Answer:ABE

4. Which three actions will help to reduce the level of Write Pending data in cache during periods of intense random update processing? (Choose three.)

A. Switch to faster disk drives.

B. Migrate from RAID5 to RAID1.

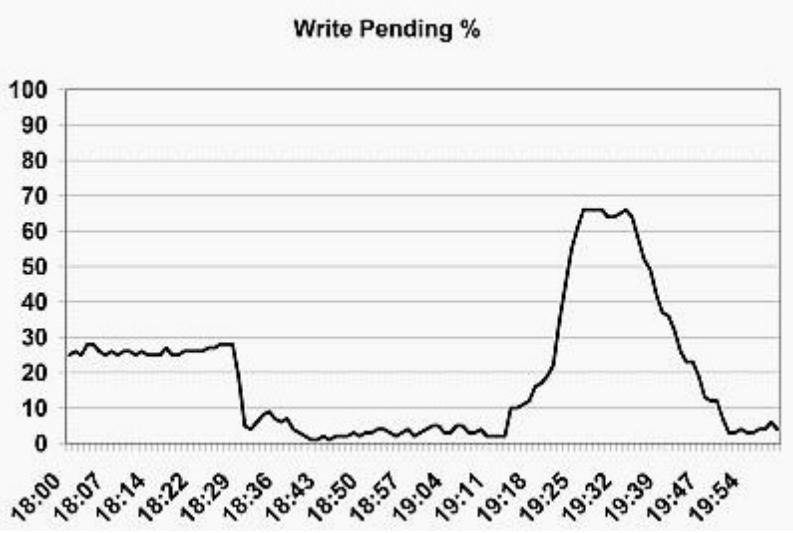
C. Spread the load across more RAID Groups.

D. Spread the load across more ports.

E. Spread the load across more LUNs.

Answer: ABC

5. Click the Exhibit button.
Which three conditions are likely causes for the write pending rates illustrated in the exhibit? (Choose three.)



A. insufficient cache

B. loss of redundancy in write cache

C. heavy random writes to RAID5

D. heavy random writes to SATA drives

E. failure to distribute workload among sufficient array groups

Answer: CDE

6. A Microsoft Exchange administrator team is responsible for managing five mailbox servers and maintaining acceptable service level objectives for your organization's email users. Accordingly, they want to setup Windows Performance Monitor to actively monitor the Exchange servers. Which Performance Monitor counter should be monitored for the Exchange database LUNs?

A. disk write bytes/second

B. disk read bytes/second

C. IO delays per sec

D. average disk read latency (ms)

Answer: D

7. A customer reports erratic occurrences of concurrent slow downs involving multiple servers directly attached to a large enterprise storage system. Each server supports an independent application and uses dedicated port processors and RAID Groups. Storage replication, thin provisioning, and external storage are used. If this problem originates in the storage, what are the two most likely causes? (Choose two.)

A. highly concurrent PAIRCREATE

B. storage system microcode problem

C. high internal path utilization

D. high cache Write Pending

Answer:AD

8. A customer reports OLTP database response times as measured by Oracle have tripled from 1 ms to 3 ms. Comprehensive data collection is present throughout the incident. Which three metrics are most relevant? (Choose three.)

A. LDEV response time

B. LUN queue depth

C. port utilization (% Busy)

D. cache hit ratio

E. BED utilization

Answer: ACD

9. When DB2 Deferred Write Threshold (DWT) is reached, high write activity occurs, this can degrade all subsystems involved with the DB2 containers. Within the entire performance chain, which three components are critical during these occurrences? (Choose three.)

A. host CPU

B. host memory

C. storage subsystem cache

D. storage subsystem front-end processors

E. storage subsystem disks

Answer: BCE

10. To eliminate disk related performance issues, which three Hitachi Tuning Manager reports would be most useful for analyzing Microsoft 2007 Exchange Storage Group LUN activity? (Choose three.)

A. RAID Map reports

B. RAID Group Configuration reports

C. RAID Group Utilization reports

D. Logical Device Response Time reports

E. Exchange MAPI Connection reports

Answer: ACD

11. Which two Hitachi Professional Services are available for modular and enterprise performance assessment and troubleshooting? (Choose two.)

A. Storage Platform Assessment (SPA)

B. Implementation Service for Hitachi Tuning Manager

C. Implementation Service for Hitachi Storage Services Manager Software

D. Tiered Storage Planning and Design Service

Answer:AB

12. In IOSTAT, which two Solaris metrics are used to determine the average read block size to a device? (Choose two.)

A. reads per second (r/s)

B. kilobytes read per second (kr/s)

C. block size (bs)

D. read block size (rbs)

Answer:AB

13. Performance monitor data indicates that CHP utilization may be causing a bottleneck in a Universal Storage Platform (USP) series system during periods of intense processing. Which two actions should be considered to increase IOPS during the bottleneck periods? (Choose two.)

A. Configure the paths using high-speed mode.

B. Spread the load across more CHP processors and paths.

C. Spread the load across more RAID Groups.

D. Spread the load across more LUNs.

Answer:AB

14. Which three statements are true regarding Hitachi storage configurations for Microsoft Exchange Server? (Choose three.)

A. RAID6 is a recommended RAID level for the database RAID Groups.

B. RAID1+0 is a recommended RAID level for the database RAID Groups.

C. RAID5 is the recommended RAID level for the log RAID Groups..

D. LUN concatenation (LUSE) is not recommended.

E. VDEV striping is a recommended configuration for database RAID Groups.

Answer: BDE

15. Which VMware multi-pathing scheme should be used to avoid non-owning access with HDS modular storage systems with multiple VMware servers?

A. Most Recently Used (MRU)

B. Fixed

C. Round-Robin

D. Extended Round-Robin

Answer: B

16. A customer is using Hitachi Dynamic Provisioning (HDP) on a Universal Storage Platform (USP) V and runs an Oracle database on HDP Volumes allocated to a HDP Pool. The customer is experiencing unexpected growth of the database and a lack of capacity in the HDP Pool. What should be done?

A. Build a new HDP Pool using the same disk and RAID type and migrate the DP-Volumes to the new pool.

B. Build a new HDP Pool using any disk and any RAID type and migrate the DP-Volumes to the new pool.

C. Extend the existing HDP Pool with Pool Volumes using the same RAID and disk type.

D. Extend the existing HDP Pool with Pool Volumes using any RAID and disk type.

Answer: C

17. Which two statements are true about the Hitachi Tuning Manager Agent for RAID Product Interval (PI) record type? (Choose two.)

A. Performance data is collected by the Agent Collector at specified intervals and summarized for every hour/day/week/month/year.

B. Configuration data is collected by the Agent Collector at specified intervals and summarized for every hour/day/week/month/year.

C. Performance Reporter can directly access Product Interval records through Hitachi Tuning Manager.

D. Product Interval.

Answer:AC

18. A customer, which runs a large Web server farm as an Internet service and hosting provider, wants to consolidate the data from all these servers from the internal server disks to an iSCSI SAN solution which uses a Universal Storage Platform (USP) V as the storage system. The IO is generally random read in small block size. Which two RAID Group configurations would you recommend for the USP V? (Choose two.)

A. RAID1 2+2

B. RAID1 4+4 C. RAID5 7+1

D. RAID6 6+2

Answer: CD

19. What happens when the Extended Round-Robin load balancing algorithm is used with an LDEV that is executing only random type IOs?

A. Performance will be severely impacted.

B. Load balancing will be disabled for this LDEV.

C. Round-Robin will be used.

D. HGLAM will be notified of this inconsistency.

Answer: C

20. Which three metrics aid in calculating how long a block of data remains available in cache after its last access? (Choose three.)

A. IOPS rate into the cache partition or storage system

B. number of available cache segments

C. the cache hit rate

D. average response time

E. average LUN queue size

Answer: ABC