

Exam : H19-338

Title : HCSP-Presales-Storage

Version : V8.02

1.Fusion Storage supports the iSCSI protocol only in VMware scenarios.

- A. True
- B. False

Answer: A

Explanation:

Virtualization Platforms and Applications

Through standard SCSI and iSCSI interfaces, FusionStorage 8.0 supports integration with various virtualization platforms, such as Xen, KVM, VMware, and Hyper-V, as well as enhanced virtualization platforms provided by different vendors, such as Huawei FusionSphere. In addition, FusionStorage 8.0 supports a wide range of database applications, such as SQL Server, Oracle RAC, DB2, and Sybase, as well as various enterprise IT applications, industry applications, and web applications.

2.Dorado V6 LUNs have controller ownership.

- A. True
- B. False

Answer: B

Explanation:

Shared Front-end Adapter

- Requests from host can be evenly distributed on every front-end link
- LUNs are shared by all controllers (aka no controller ownership).

3.To configure HyperMetro for LUNs that are carrying host services, you must first stop the host services.

- A. True
- B. False

Answer: B

Explanation:

If the LUN for which you want to implement HyperMetro is carrying host services and it is difficult to determine when the system is busy or idle, you are advised to set the parameter to Medium to minimize the impact on host services.

4.HyperCDP objects can be used to restore data but cannot be directly mapped to hosts for read and write operations.

- A. True
- B. False

Answer: B

5.The full-stripe write technology supported by Dorado can effectively improve SSDs' service life.

- A. True
- B. False

Answer: A

Explanation:

Based on characteristics of SSDs, OceanStor Dorado V6 uses ROW. In comparison with overwrite, full-stripe write avoids the overhead of reading disks brought by the write penalty, and also avoids frequent overwrites of parity data. After the data in the logical space is overwritten, the original data on the

disk becomes garbage. The garbage data is released after being reclaimed in the background. Meanwhile, garbage reclaiming also produces extra overhead which has impact on the service performance after the reclaiming starts.

6. Controllers must be restarted during software NDU upgrade of Dorado V6.

- A. True
- B. False

Answer: B

7. When performing a controller fault test on the Dorado V6 mission-critical product models, ensure that each controller has a link to the host.

- A. True
- B. False

Answer: B

Explanation:

For Host, only one session

For controllers, have their own sessions to host

8. Huawei is the only storage vendor that has passed the 9-intensity earthquake resistance certification in China.

- A. True
- B. False

Answer: A

9. Huawei HyperMetro (active-active) solution supports non-disruptive capacity expansion.

- A. True
- B. False

Answer: A

10. Huawei active-active (HyperMetro) solution must use Huawei UltraPath.

- A. True
- B. False

Answer: B

11. Does incremental EC directly aggregate large objects and affect performance?

- A. Yes
- B. No

Answer: A

12. OceanStor 100D uses NVDIMMs as cache, which can prevent data loss during power failure.

- A. Yes
- B. No

Answer: A

13.OceanStor 100D provides inline deduplication.

- A. True
- B. False

Answer: A

14.Two quorum devices are deployed at the third-place site.

Both quorum devices can be used for arbitration at the same time.

- A. True
- B. False

Answer: B

15.OceanStor 100D can be deployed on standard universal servers.

- A. True
- B. False

Answer: B

16.In the test case of front-end interface module redundancy, you must first power off the controller and then the front-end interface module.

- A. True
- B. False

Answer: B

17.RAID2.0+ is a block-based virtualization technology. Disks are divided into CKs and CKGs form RAID groups. Therefore, compared with traditional RAID, RAID2.0+ does not require hot spare disks or hot spare space.

- A. True
- B. False

Answer: B

18.The system availability is 99.999%, indicating that the annual interruption time of the storage array is about 5 minutes.

- A. True
- B. False

Answer: A

19.Unity XT supports full configuration of NVMe SSDS.

- A. True
- B. False

Answer: B

20.The active-active status will be interrupted if a quorum server is faulty.

- A. True
- B. False

Answer: B

21.The OceanStor Os's data plane and management plane are isolated from each other. Faults on either plane will not affect the other plane

- A. True
- B. False

Answer: A

22.Dorado V6 supports both scale-out and scale-up.

- A. True
- B. False

Answer: A

23.Huawei is the only storage supplier that has passed the 9 intensity earthquake resistance certification in China.

- A. True
- B. False

Answer: A

24.HyperMetro quorum servers can be deployed on VMs.

- A. True
- B. False

Answer: A

25.The deduplication and compression ratio of each LUN can be viewed on the DeviceManager of Dorado V3 (same with Dorado VG)

- A. True
- B. False

Answer: A

26.Enabling the Fast Write function of replication links between storage arrays can reduce the amount of data to be transmitted by 50%

- A. True
- B. False

Answer: A

27.Oceanstor Dorado V6 series includes entry-level mid-range and high-end product models.

- A. True
- B. False

Answer: A

28.After the SSD is removed the dirk domain of the OceanStor Dorado V3 (same with Dorado V6) storage system reconstructs data immediately.

- A. True
- B. False

Answer: A

29.The OceanStor OS has multiple innovative technologies to improve storage system reliability, including Huawei RAIG2.0+, SmartMatrix2.0, and HyphenMetro.

- A. True
- B. False

Answer: A

30.In OceanStor Dorado V6, one LUN is enough for testing close-to-maximum performance.

- A. True
- B. False

Answer: B

31.The entire Dorado V6 series supports front-end and back-end interconnect shared T/O modules.

- A. True
- B. False

Answer: A

32.In OceanStor V5, one LUN is enough for testing the ultimate performance.

- A. True
- B. False

Answer: B

33.HIS refers to hospital management information system. It collects stores, transfers, analyzes queries and may share patient finance and material information, as well as generates reports to provide comprehensive and accurate data for hospital leaders and management personnel of each department.

- A. True
- B. False

Answer: A

34.OceanStor Dorado V6 supports SAS SSDs only.

- A. True
- B. False

Answer: B

35.Which is the technology used for end-to-end protection of data integrity in the industry?

- A. CRC
- B. T10 PI
- C. SHA

Answer: B

36.Which method can be used to upgrade a Dorado active-active (HyperMetro) solution to a 3DC solution?

- A. Synchronous replication

- B. Active-active
- C. Asynchronous replication
- D. Volume mirroring

Answer: C

37.Which of the following statements is incorrect about the Active-active architecture of Dorado V6?

- A. LUNs are not owned by any controller.
- B. The logical paths of the host are Active-Active.
- C. Load is balanced among controllers.
- D. ALUA must be configured when the operating system's native multipathing software is used.

Answer: D

38.What is the purpose of using sequential I/Os to overwrite all LUNs before testing Dorado performance?

- A. To ensure correct deduplication and compression ratios
- B. To ensure that all space of thin LUNs is allocated so read performance is close to that in actual scenarios
- C. To provide better performance

Answer: C

39.Which of the following statements about the relationship between HyperMetro and multipathing software is correct?

- A. HyperMetro can be used only when Huawei UltraPath is used
- B. HyperMetro is irrelevant to multipathing software
- C. HyperMetro supports native multipathing software of compatible operating systems, such as VMware NMP, MPIO, and Device Mapper

Answer: C

40.Which is NOT a typical application of HyperMetro for SAN?

- A. Oracle RAC application
- B. VMware vSphere application
- C. SAP HANA application (in application mode)
- D. SQL Server application

Answer: C

41.In static-priority arbitration mode, if the active-active relationships are functional, but all replication links between storage arrays are down, what will happen?

- A. Services stop at the preferred site while they continue at the non-preferred site
- B. Services continues at the preferred site while they stop at the non-preferred site
- C. Services stop at both the preferred and non-preferred sites
- D. Services continues at both the preferred and non-preferred sites

Answer: B

42.Which statement about the recommended deployment of the quorum device is true?

- A. Deploy the quorum device at the preferred site.
- B. Deploy the quorum device at the non-preferred site.
- C. Deploy the quorum device at the third-place site.
- D. Do not deploy the quorum device.

Answer: C

43.Which is the scale-out networking protocol that OceanStor Dorado V6 supports?

- A. FC
- B. IB
- C. RoCE
- D. PCIe

Answer: C

44.In database application scenarios, which is the recommended latency of the active-active (HyperMetro) replication network?

- A. 0.5
- B. 1
- C. 2
- D. 3

Answer: B

45.Which statement about the ROW technology for OceanStor V5 is true?

- A. Block snapshots use the ROW technology
- B. ROW-based snapshots do not have extra data copies, and therefore the performance is better.
- C. One of the advantages of ROW is that it does not easily generate data fragments

Answer: B

46.Which technology does FusionStorage HyperSnap run on?

- A. COW
- B. ROW

Answer: B

47.The storage system monitors the responses to I/Os delivered to disks. If the responses exceed the upper limit, the RAID group experiences a read degrade to quickly respond to the hosts. This technology is called:

- A. Online diagnosis
- B. Slow disk detection
- C. Rapid response to slow I/Os

Answer: B

48.Which statement about the replication network between storage arrays in an active-active (HyperMetro) network is NOT true?

- A. The active-active (HyperMetro) replication network supports the FC network
- B. The active-active (HyperMetro) replication network supports the IP network

- C. The active-active (HyperMetro) replication network bandwidth must be larger than the average service bandwidth
- D. Each controller of active-active (HyperMetro) arrays has at least two redundant links

Answer: D

49.A technology evenly distributes workloads to each disk, thereby preventing continuous hot data access from causing a premature failure of some disks. This technology is called

- A. Wear leveling
- B. Anti-wear leveling
- C. Hot cache

Answer: A

50.Which technique is used to protect end-to-end data integrity?

- A. DIX+T10
- B. CRC
- C. SHA

Answer: A

51.In FusionStorage 8.0.0, what is the minimum number of disks needed for each node?

- A. 3
- B. 4
- C. 5

Answer: B

52.How to test the failure of three controllers on a Dorado V6 mission-critical storage system with four controllers (SmartMatrix)?

- A. Simulate the faults on three controllers at the same time
- B. Simulate the faults on any two controllers. After 5 minutes, simulate the fault on the third controller.

Answer: B

53.When only one LUN is configured in a Dorado V6 system, how many controllers are involved in the process?

- A. 1
- B. 2
- C. 4
- D. All controllers online

Answer: D

54.The OceanStor OS monitors the response time of I/Os sent to disks. If the time exceeds the threshold, the system quickly responds to hosts through degraded reading of RAID groups. The technique is called

- A. Online diagnostics
- B. Slow disk detection
- C. Quick response to slow I/Os

Answer: B

55.Which statement about the interconnection of Huawei storage systems for remote replication based on OceanStor OS is NOT true?

- A. Different types interconnection among OceanStor Dorado, OceanStor V3, and OceanStor V5
- B. Different levels interconnection among high-end, mid-range, and entry-level storage systems of OceanStor
- C. Different generations interconnection between OceanStor V5 and OceanStor V3
- D. Different vendors interconnection among Huawei, EMC, and HDS storage systems

Answer: D

56.HyperMetro uses the quorum server mode. If all replication links between two sites are down, what are the Health Status, Running Status, and Link Status of the HyperMetro pair?

- A. Faulty, To be synchronized, Link down
- B. Abnormal, Faulty. ...
- C. Faulty. Normal. To be recovered

Answer: B

57.HyperMetro uses the quorum server mode. If all replication links between two sites are down, which site survives and continues providing services?

- A. The site that wins the arbitration
- B. Preferred site
- C. Non-preferred site

Answer: B

58.What is the minimum activation interval supported by HyperCDP of Dorado V6?

- A. 3s
- B. 5s
- C. 10s
- D. 30s

Answer: A

59.Among the Dorado series storage systems, which back-end technology provides the shortest theoretical latency?

- A. NVMe
- B. SAS
- C. PCIe

Answer: A

60.Which is NOT the arbitration granularity supported by HyperMetro arbitration?

- A. HyperMetro vStore pair
- B. HyperMetro vStore consistency group
- C. HyperMetro LUN pair
- D. HyperMetro LUN consistency group

Answer: B

61.Which is the protocol for networking a smart disk enclosure with controller enclosures?

- A. SAS
- B. FC
- C. 100GE RoCE
- D. PCIe

Answer: C

62.Which statement is NOT true about OceanStor 100D?

- A. OceanStor 100D uses strong consistency protocols
- B. OceanStor 100D supports only x86 servers
- C. OceanStor 100D can provide file, object, and block storage services at the same time
- D. All OceanStor 100D software is developed by Huawei and has proprietary intellectual property rights

Answer: A

63.How many remote devices does OceanStor 100D HyperReplication support at most?

- A. 8
- B. 32
- C. 16

Answer: B

64.Which of the following statement is incorrect about the Active-Active architecture of Dorado V6?

- A. Load is balanced among controllers.
- B. ALUA must be configured when the operating system's native multipathing software is used.
- C. LUNs are not owned by any controller.
- D. The logical paths of the host are Active-Active.

Answer: B

65.How many controllers can be concurrently accessed by a single SSD in OceanStor Dorado V6 high-end storage?

- A. 8
- B. 2
- C. 4
- D. 1

Answer: A

66.Which product family of Dell EMC can be connected to IBM mainframe servers?

- A. Unity
- B. Isilon
- C. PowerMax 8000
- D. PowerMax 2000

Answer: C

67.When SmartQoS is configured on Dorado V6 and the max, normalized IOPS (8 KB) is set to 10,000 for

a target LUN, the maximum IOPS of the target LUN is ____ when 16 KB I/Os are written to and read from the target LUN.

- A. Less than 10,000. The traffic limit is about 8,500 IOPS.
- B. 10,000 IOPS

Answer: A

68.Which is a backup solution from Dell EMC?

- A. NetWorker
- B. Veeam
- C. EISOO
- D. NetBackup

Answer: A

69.Assume a customer needs to generate a large number of data copies based on the scheduling policy to recover data if production data is deleted by mistake.

Which is the feature that must be configured?

- A. HyperReplication
- B. HyperClone
- C. HyperSnap
- D. HyperCDP

Answer: D

70.How many IOPS can OceanStor 100D Block reach for a single client?

- A. 70,000
- B. 80,000
- C. 50,000
- D. 60,000

Answer: B

71.HyperMetro uses the quorum server mode. If all replication links between two sites are down, which site survives and continues providing services?

- A. Non-preferred site
- B. The site that wins the arbitration
- C. Preferred site

Answer: C

72.Which of the following statements about LUN mapping on Dorado V6 is incorrect?

- A. New LUN groups can be directly mapped to a host.
- B. A mapping view must be created.
- C. LUNs or LUN groups can be created on the host mapping page
- D. New LUNS can be directly mapped to a host or added to a LUN group (which has been mapped to a host)

Answer: D

73.Which of the following is not a VDI application scenario in the healthcare industry?

- A. Surgical treatment room
- B. Patient information and management system
- C. Public terminal
- D. Telemedicine assistance and training

Answer: A

74.In static-priority arbitration mode, if the active-active relationships are functioning, but all replication links between storage arrays are down.

What will happen?

- A. Services stop at the preferred-site while they continue at the non-preferred site
- B. Services continue at the preferred site while they stop at the non-preferred site
- C. Service stop at both the preferred and non-preferred sites
- D. Service continues at both the preferred and non-preferred sites

Answer: B

75.What is the specification of the OceanStor Dorado V6 high-end controller?

- A. 2 controllers per 2U
- B. 3 controllers per 3U
- C. 4 controllers per 3U
- D. 4 controllers per 4U

Answer: D

76.The HyperMetro architecture of OceanStor Dorado V6 belongs to which of the following categories?

- A. Active-active gateway-free
- B. Active-active gateway
- C. Active-passive gateway-free
- D. Active-passive gateway

Answer: A

77.Which of the following is the most important storage requirement of the HIS System?

- A. High performance
- B. High reliability
- C. High deduplication and compression ratio
- D. Intelligent O&M

Answer: A

78.What is the IO model for Vdbench performance testing on the test of "Random Read and Write Performance (With Data Reduction)?

- A. 16KB_70%Read_100% Random
- B. 8KB_100%Read_70%Radom
- C. 8KB_70%Read_100%Random

Answer: C

79.Which software architecture does the OceanStor V5 use?

- A. Parallel block and FS architecture
- B. FS-based block architecture
- C. Block-based FS architecture

Answer: A

80.Among the Dorado series storage systems, which of the following back-end technologies provides the lowest theoretical latency?

- A. NVMe
- B. SAS
- C. PCIe

Answer: A

81.Which model does not support NVMe SSD?

- A. OceanStor Dorado 3000 V6
- B. OceanStor Dorado 5000 V6
- C. OceanStor Dorado 6000 V6
- D. OceanStor Dorado 18000 V6

Answer: A

82.Which statements about the interconnection between Huawei storage systems using the OceanStor OS is not true?

- A. Between different types: interconnection between OceanStor Dorado, FV5, and V5
- B. Between different models: OceanStor mission-critical, mid-range, and entry-level storage systems
- C. Between different generations: OceanStor V5, OceanStor V3
- D. Between different vendors: Huawei, EMC, and HDS

Answer: D

83.What is the name of the OceanStor Dorado V6 storage architecture?

- A. SmartMatrix
- B. Virtual Matrix
- C. ASIC

Answer: A

84.Which of the following is the minimum RAID unit of Huawei RAID 2.0+?

- A. Disk
- B. Block (chunk)
- C. Cache

Answer: B

85.Which of the following specifications is correct for NVMe disk enclosures (Intellegent DAE)?

- A. 25 disks per 1U
- B. 25 disks per 2U
- C. 36 disks per 1U

D. 36 disks per 2U

Answer: D

86.Which technology can achieve zero RPO?

- A. Snapshots
- B. Asynchronous replication
- C. Active-active
- D. Clone

Answer: C

87.Dorado V3 (same with Dorado V6) supports three kinds of RAID types _____, and the default RAID type is _____, while _____ supports triple disk failure.

- A. RAID-5/RAID-6/RAID-TP; RAID-6; RAID-TP
- B. RAID-5/RAID-6/RAID-10; RAID-5; RAID-10
- B. RAID-5/RAID-6/RAID-TP; RAID-5; RAID-TP

Answer: A

88.Before the PoC test for Dorado V3, which of the following statements about Dorado V3 test is true (same with Dorado V6)?

- A. We need to collect the host type and version.
- B. We need to collect the application type of example, database, VDF, etc.
- C. We should try to collect the I/O block size from application. Then we can select a suitable I/O block size when we create LUNs.
- D. All of the above.

Answer: D

89.Which of the following models supports expansion of up to 32 controllers?

- A. OceanStor Dorado 3000 V6
- B. OceanStor Dorado 5000 V6
- C. OceanStor Dorado 6000 V6
- D. OceanStor Dorado 18000 V6

Answer: D

90.Which statement about the Dorado's global garbage collection (GC) are correct? (Multiple choice)

- A. Dorado supports intelligent adjustment of multiple GC levels based on the garbage percentage and CPU usage.
- B. When a conflict occurs, user I/Os and metadata always have a higher priority than GC.
- C. Global GC issues TRIM commands to trigger GC on SSDs.

Answer: ABC

91.What technical features does Huawei's active-active (HyperMetro) solution provide? (Multiple choice)

- A. HyperMetro for SAN and NAS
- B. Dual arbitration
- C. cross-site bad block repair

D. Visual management

Answer: ABCD

92.Which statements about Huawei's geo-redundant 3DC DR solution are true? (Multiple choice)

A. HyperMetro SAN support DR Star.

B. Visual DR management and one-click DR drill and recovery are supported.

C. Interworking of DR services among entry-level mid-range, and high-end storage arrays is supported.

D. HyperMetro NAS supports DR Star.

Answer: ABC

93.Which statements about dynamic reconstruction are true? (Multiple choice)

A. The data redundancy decreases.

B. Dynamic reconstruction is faster than ordinary reconstruction.

C. The number of RAID members decreases.

D. The number of RAID members remains unchanged.

Answer: BC

94.Which are the main features of distributed storage? (Multiple choice)

A. Deployed on general purpose servers.

B. Can expand capacity by adding servers.

C. Can reduce capacity by removing servers.

D. Can reduce capacity by removing servers.

Answer: ABC

95.What are the typical networking modes of a FusionStorage cluster? (Multiple choice)

A. Isolated front-end and back-end storage networks.

B. Integrated front-end and back-end storage network.

C. TCP/IP, InfiniBand, and RoCE networks.

Answer: ABC

96.Which of the following RAID levels are supported by Dorado V6? (Multiple choice)

A. RAID 10

B. RAID 6

C. RAID 5

D. RAID TP

Answer: ABCD

97.Which arbitration mode does Huawei's active-active (HyperMetro) solution support? (Multiple choice)

A. Quorum disk

B. Quorum server

C. Heartbeat

D. Static priority

Answer: BD

98.Which storage systems support gateway-free active-active configuration? (Multiple choice)

- A. NetApp A300
- B. EMC PowerMax
- C. EMC Unity
- D. Huawei OceanStor V5

Answer: BD

99.Which statements about the quorum network in the HyperMetro network are true? (Multiple choice)

- A. The quorum network supports the IP network.
- B. The quorum network supports the FC network.
- C. The quorum network requires that the latency be less than or equal to 50 ms.
- D. The quorum network requires that the link bandwidth be greater than or equal to 10 Mbit/s.

Answer: ACD

100.Which of the following are possible statuses of HyperMetro? (Multiple choice)

- A. Normal
- B. Synchronizing
- C. Awaiting Synchronized
- D. Paused
- E. Force Start

Answer: ABDE

101.What are the highlights of Huawei's HyperMetro NAS solution? (Multiple choice)

- A. No additional gateways are required.
- B. The dual-arbitration mode is provided.
- C. Cross-site bad block repair is supported.
- D. The active-active (HyperMetro) solution can be smoothly upgraded to the geo-redundant 3DC DR solution.
- E. FastWrite is supported.

Answer: ABCDE

102.Which statements are true about the benefits of deduplication and compression provided by FusionStorage? (Multiple choice)

- A. Saving storage space.
- B. Reducing the initial storage purchase cost.
- C. Reducing the TCO
- D. Extending the SSD service life.

Answer: ABC

103.Which technologies can reduce write I/O latency in long-distance active-active scenarios? (Multiple choice)

- A. Gateway-free design
- B. FastWrite
- C. RDMA

D. Optimistic lock

Answer: ABD

104.What are the benefits of the multi-stream technology supported by Dorado? (Multiple choice)

- A. Less write application
- B. Longer SSD service life
- C. No garbage collection overhead on SSDs.

Answer: ABC

105.Which of the following statements are correct about the performance test of Dorado V6 mid-range product models on a Fiber Channel network? (Multiple choice)

- A. Dorado V6 delivers similar performance when using RAID 5, RAID 6, and RAID-TP.
- B. The test performance of a single LUN on Dorado V6 can reach over 80% of the system performance.
- C. The performance when native multipathing software is used is similar to that when UltraPath is used.

Answer: AB

106.Which statement about the DR star for OceanStor V5 is true? (Multiple choice)

- A. Active-active + asynchronous replication + asynchronous replication (standby).
- B. Asynchronous replication + asynchronous replication + asynchronous replication (standby)
- C. Synchronous + asynchronous replication + asynchronous replication (standby)

Answer: AC

107.Which replication link types do Huawei active-active (HyperMetro) solution support? (Multiple choice)

- A, Fiber Channel
- B. IP
- C. InfiniBand
- D. SAS

Answer: AB

108.Which of the following are benefits of front-end interconnect (shared) I/O modules? (Multiple choice)

- A. Host path loss prevention in the event of controller failure, controller hard/software upgrades, and even single FC 1 between host and storage.
- B. Storage sysadmins are needed to ensure the multipath software in servers runs online before controller upgrades.
- C. Fewer front-end modules and host links needed.
- D. Direct data dispatch to the distributed controllers through front-end modules in one controller enclosure.

Answer: AC

109.Which of the following are features of the entire Dorado V6 series. (Multiple choice)

- A. Upgrades most of components in user mode within 1 second.
- B. I/O interruption time of controller failover within 1 second.
- C. Fixed-length and variable-length data deduplication.
- D. Intelligent DAE

Answer: ABCD

110.Which technologies are used to improve Dorado performance? (Multiple choice)

- A. RAID-IP
- B. CPU grouping algorithm that uses dedicated cores for I/O reads and writes.
- C. Full-strip write
- D. I/O priority scheduling policy that assigns different priorities for different types of I/Os.
- E. Wear leveling and anti-wear leveling technologies.

Answer: BCD

111.Which Dorado versions or models support Non-Disruptive Upgrade (NDU)? (Multiple choice)

- A. Dorado V3
- B. Dorado V6 entry-level models
- C. Dorado V6 mid-range models
- D. Dorado V6 high-end models

Answer: BCD

112.Which of the following are the end-to-end architecture optimization implemented by Dorado? (Multiple choice)

- A. ROW-based full-stripe write and snapshot technology
- B. Multi-stream technology on SSDs.
- C. Global garbage collection
- D. RAID-TP

Answer: ABC

113.Which statements about the SmartTier feature for FS are NOT true? (Multiple choice)

- A. The media in the FS SmartTier feature are divided into three layers SSD, SAS, and NL-SAS.
- B. The migration unit of the FS SmartTier feature is Extent.
- C. The SmartTier features of the FS can define the migration rate.
- D. The scope of the SmartTier feature of the FS is a single pool.

Answer: ABCD

114.Which reliability technologies are used in Huawei all-flash storage? (Multiple choice)

- A. RAID
- B. Bad block management
- C. Power failure protection
- D. Wear leveling

Answer: ABD

115.Which networking architectures are provided by Huawei geo-redundant 3D DR solution? (Multiple choice)

- A. Serial networking
- B. Parallel networking
- C. Ring networking

Answer: ABC

116.Which of the following are storage protocols for host connection in SAN? (Multiple choice)

- A.FC
- B. iSCSI
- C. NoF (NVMe over Fabric)
- D. SAS

Answer: ABC

117.In an active-active (HyperMetro) network, which network types are supported between hosts and storage arrays? (Multiple choice)

- A. HyperMetro SAN supports the FC network
- B. HyperMetro SAN supports the IP network.
- C. HyperMetro NAS supports the FC network.
- D. HyperMetro NAS supports the IP network.

Answer: ABD

118.Which are the capacity expansion methods that OceanStor Dorado V6 supports? (Multiple choice)

- A. If the licensed effective capacity is insufficient, expand licensed capacity.
- B. If the effective capacity of the controller enclosure is insufficient, increase the number of controllers.
- C. If the physical capacity of a domain is insufficient, add disks or disk enclosures.
- D. If the number of front-end host ports is insufficient, increase the number of front-end interface modules.

Answer: BC

119.FastWrite improves performance by 30%.

How many kilometers between active-active data centers can this improvement be applied to? (Multiple choice)

- A. 0 km
- B. 20 km
- C. 50 km
- D. 100 km

Answer: CD

120.In an OceanStor Dorado V6 architecture with two controller enclosures and eight controllers, which scenarios are supported for high availability? (Multiple choice)

- A. Tolerance of simultaneous failures of any two controllers.
- B. Tolerance of simultaneous failures for any three controllers.
- C. Tolerance of a single controller enclosure failure.
- D. Tolerance of simultaneous failures for seven controllers.

Answer: AC

121.Which models support continuous cache mirroring? (Multiple choice)

- A. 5500V5
- B. 6800 V5

- C. 18500 V5
- D. 18800 V5
- E. 5800 V5

Answer: BCD

122.Which networking modes does the OceanStor 100D storage plane support? (Multiple choice)

- A. GE
- B. 10GE
- C. ROCE
- D. InfiniBand

Answer: BCD

123.In which storage produces are LUNs not bound to controllers? (Multiple choice)

- A. HDS F1500
- B. EMC PowerMAX/VMAX
- C. HDS G5000
- D. EMC Unity
- E. Huawei OceanStor Dorado V6

Answer: BCE

124.Which statements about OceanStor 100D are true? (Multiple choice)

- A. It stores metadata in metadata nodes.
- B. It employs a distributed cluster architecture.
- C. It provides background data consistency checks.
- D. It can be scaled out to a maximum of 4096 nodes.

Answer: ABCD

125.Which of the following consistency groups (CGs) can be created based on protected groups of Dorado V6? (Multiple choice)

- A. Clone CG
- B. Asynchronous remote replication CG
- C. Snapshot CG
- D. HyperMetro CG
- e. 3DC CG

Answer: ACD

126.In Europe, Customer A is using SmartIDC for discovery and Assessment (DNA).

Which SmartIDC platforms can be used for analysis? (Multiple choice)

- A. Upload data to the SmartIDC China site for analysis
- B. Deploy SmartIDC Analyzer for analysis.
- C. Upload data to the SmartIDC Germany site for analysis.

Answer: BC

127.Which functions does SmartQoS provide on OceanStor Dorado V6? (Multiple choice)

- A. Latency control
- B. LUN priority
- C. Maximum bandwidth
- D. Maximum IOPS

Answer: CD

128. Which are the convergence technologies that OceanStor V5 converged storage support? (Multiple choice)

- A. Convergence of storage resource pools: resource pooling and interruption free heterogeneous migration.
- B. Convergence of flash storage: interconnection between different types, models, and generations.
- C. Convergence of SAN and NAS: HyperMetro for SAN and NAS, multi-service integration.
- D. Cloud convergence: hybrid cloud interoperability, along with public cloud migration, backup, and DR.
- E. Active-active convergence: HyperMetro for SAN and NAS, RPO=0, RTO=0.

Answer: ABCE

129. In addition to all-flash storage, Huawei also provides OceanStor V5 converged storage systems. Which statements are TRUE? (Multiple choice)

- A. OceanStor V5 converged storage is the first choice for most customers.
- B. Dorado V6 is the first choice we recommend for customers.
- C. OceanStor V5 supports intermixing of SSDs and HDDs, and tiered storage, reducing investment.
- D. OceanStor V5 provides metro solution with unified SAN and NAS, reducing customers' investment and O&M costs.

Answer: ABCD

130. Which disaster recovery solutions can Huawei Dorado V6 provide for customers? (Multiple Choice)

- A. Async. Storage replication solutions
- B. Sync. Storage replication solutions
- C. Active-active solutions
- D. CDM solution with near real-time, continuous data protection
- E. DR-Star networking solutions

Answer: ABCDE

131. Which statements about FusionStorage are true? (Multiple Choice)

- A. It employs a distributed cluster architecture.
- B. It stores metadata in metadata nodes.
- C. It provides background data consistency checks.
- D. It can be scaled out to a maximum of 4096 nodes.

Answer: ABCD

132. Which functions can be implemented by the host multipathing software? (Multiple Choice)

- A. Failover
- B. Failback
- C. Load balancing

Answer: ABC

133.The Dorado supports HyperMetro (active-active).

Which statements are true? (Multiple Choice)

- A. Gateway-free active-active, low cost, fewer fault points, and shorter latency
- B. Load balancing between sites with zero RPO and close-to-zero RTO
- C. Easy to expand and upgrade to 3DC, which provides reliable data protection without data migration
- D. VMs cannot be used as quorum servers.
- E. The Dorado can use HyperMetro to work with OceanStor V5 hybrid storage to establish a 3DC deployment mode, reducing customers TCO.

Answer: ABCE

134.Which of the following contribute to the high reliability of Dorado high-end systems? (Multiple Choice)

- A. Front-end and back-end interconnect (shared) I/O modules
- B. Smart DAE
- C. FastWrite
- D. NDU

Answer: ABD

135.Which problems can continuous mirroring solve? (Multiple Choice)

- A. Two controllers fail at the same time
- B. Two controllers fail at an interval of 20 minutes.
- C. Two controllers fail at an interval of 10 seconds.
- D. The customer has not replaced it within 10 days after the controller fails.

Answer: ABCD

136.Which part does a Discovery and Assessment (DNA) report generated by SmartIDC contain? (Multiple Choice)

- A. Solution suggestion
- B. Assessment
- C. Customer business planning
- D. As-is analysis

Answer: ABCD

137.Which of the following statements about Dorado V6 system software upgrade are correct? (Multiple Choice)

- A. Component-based upgrade greatly shortens the upgrade time.
- B. Mid-range storage systems do not support upgrade over a single link.
- C. The link between the host and the storage system is interrupted during the upgrade.
- D. Controllers do not restart during the upgrade. Services are not impacted and hosts are unaware of the upgrade.
- E. Both mission-critical and mid-range storage systems support upgrade over a single link.

Answer: ADE

138.Which statements about HyperMetro (Active-Active) supports by Dorado are correct? (Multiple Choice)

- A. Gateway-free
- B. Online upgrade from a single DC to dual-DC HyperMetro
- C. Online upgrade from the HyperMetro solution to the 3DC solution

Answer: ABC

139.Which are the key technologies of SmartMatrix 3.0? (Multiple Choice)

- A. Back-end Interconnect I/O Module (BIM)
- B. FC Front-end Interconnect I/O Module (FC FIM)
- C. Continuous cache mirroring
- D. iSCSI and NAS FIM

Answer: ABC

140.What facts can be used to clear customers' security concerns about SmartIDC-Grad (Information Collection) ? (Multiple Choice)

- A. No plug-in is installed.
- B. Only open APOs and CLI commands of the collected devices are invoked.
- C. SmartIDC-Grab has been tested and certified by professional antivirus and security vulnerability scan tools.
- D. Success stories

Answer: ABC

141.In an OceanStor Dorado V6 Architecture with two controller enclosures and eight controllers, which scenarios are supported for high availability? (Multiple Choice)

- A. Tolerance of a single controller enclosure failure
- B. Tolerance of simultaneous failures of any two controllers
- C. Tolerance of simultaneous failures for seven controllers
- D. Tolerance of simultaneous failures for any three controllers

Answer: BD

142.Which models does the mid-range all-flash storage of Hitachi Vantara include? (Multiple Choice)

- A. 350F
- B. 700F
- C. 370F
- D. 900F

Answer: ABCD

143.Which of the following are application scenarios of disk pre-copy? (Multiple choice)

- A. Slow disk
- B. Risky disk
- C. Failed disk

Answer: AB

144.Which of the following models supports expansion to up to 32 controllers?

- A. OceanStor Dorado 300 V6
- B. OceanStor Dorado 5000 V6
- C. OceanStor Dorado 6000 V6
- D. OceanStor Dorado 8000 V8

Answer: D

145.Which of the following are benefits of front-end interconnect (shared) I/O modules? (Multiple choice)

- A. Host path loss prevention in the event of controller failure controller hard/software upgrades, and even single FC link between host and storage
- B. Storage sysadmins are needed to ensure the multipath software is servers runs online before controller upgrades
- C. Fewer front-end modules and hst links needed
- D. Direct data dispatch to the distributed controller through front-end modules in one engine controller enclosure

Answer: ACD

146.Which of the following are NOT true about OceanStor Dorado V6? (Multiple choice)

- A. OPS up to 20 million
- B. Latency as low as 0.7
- C. Controller failure tolerance of 7 out of 8 (controllers for every model)
- D. NVMe for every model

Answer: BD

147.In OceanStor V5, what protocols are supported by NAS? (Multiple choice)

- A. NFS
- B. CIFS
- C. HTTP
- D. FTP

Answer: ABCD

148.Which of the following are SmartMatrix features of OceanStor Dorado V5? (Multiple choice)

- A. Zero interruption on applications, industry's only storage that tolerance failures of up to 7 out of 8 controllers
- B. Zero host awareness of faults: 1 second switchover and interrupted links in the event of controller failure for upper layer services
- C. Zero impact during upgrades, Component based online upgrades (second) for unaffected and uninstalled host services
- D. Full protection; Zero data loss and zero business interruption if either 1 of 2 OceanStor Dorado V6 engines break down in a cluster

Answer: ABC

149.What are the front-end protocols of OceanStor Dorado V6? (Multiple choice)

- A. 16G FC
- B. 32G FC
- C. 40G Ethernet
- D. 100G Ethernet

Answer: ABCD

150.Which of the following are the three levels of SSD wear? (Multiple choice)

- A. Mid-wear < 25%
- B. Moderate wear: 50% <&<85%
- C. Severe wear > 85%
- D. Mid wear < 50%

Answer: BCD

151.Which of the following are features of the entire Dorado V6 series? (Multiple choice)

- A. Upgrades of 94% of components in user model within 1 second
- B. I/O interruption time of controller failover within 1 second
- C. Fixed length and variable length data deduplication
- D. Intelligent DAE

Answer: ACD

152.Which of the following network architectures can Huawei provide in the DR solution in geo-redundant mode? (Multiple choice)

- A. Serial
- B. Parallel
- C. Star
- D. Delta Resync

Answer: ABC

153.Which of the following features make OceanStor capable of storing PACS data over a 15-year period? (Multiple choice)

- A. Elastic scalability
- B. Intelligent lifecycle management
- C. Security and reliability
- D. Simplified management

Answer: ABCD

154.What are the benefits of intelligent DAEs? (Multiple choice)

- A. Improved storage performance
- B. Accelerated data reconstruction
- C. Reduced impact on services during data reconstruction
- D. Reduced power consumption

Answer: ABC

155.In the dual engine configuration of OceanStor Dorado 18000,data can still be accessed even if

multiple controllers fail. The OceanStor Dorado 18000 can handle which of the following failure scenarios? (Multiple choice)

- A. A single controller fails
- B. Two controller fail simultaneously at the same time point
- C. A single engine fails
- D. Up to seven controllers fail simultaneously at the time point

Answer: ABCD

156.Which of the following chips are part of the Dorado V6 in addition to Dorado V3's self-developed chips? (Multiple choice)

- A. CPU chip
- B. SSD controller chip
- C. BMC chip
- D. AI chip
- E. Multi-protocol interface chip

Answer: ABCDE

157.Why does NVMe provide better performance than SAS? (Multiple choice)

- A. The CPU can directly access devices through NVMe. There is no need for SAS protocol conversion
- B. Interaction times of the NVMe protocols are only half that of the SAS protocols
- C. The NVMe architecture supports increased I/O concurrency
- D. None of the above

Answer: ABC

158.Which DR features can deliver zero RPO? (Multiple choice)

- A. HyperMetro
- B. HyperReplication Synchronous
- C. HyperReplication Asynchronous
- D. SmartMigration

Answer: AB

159.Which of the following are OceanStor Dorado V6 capability? (Multiple choice)

- A. Smart DAE
- B. Engine(Controller enclosure) level failure tolerance
- C. Symmetric active-active controller
- D. AI engine

Answer: ABCD