

Huawei HCEI Intelligent Computing v1.0

1. Heterogeneous computing is a new computing model after single-core computing and multi-core parallel computing. Which of the following descriptions about the background of heterogeneous computing is wrong?

A. The performance improvement brought by multi-core parallelism is limited. With the increase of parallelism, the problems of heat dissipation and energy consumption have become increasingly prominent.

B. Heterogeneous computing maximizes the performance of each processor, and delegates the most suitable task to the best computing unit.

C. Moore's Law is getting closer and closer to the physical limit, and the difficulty and cost of improving single-core performance are getting higher and higher.

D. NUMA is a mode of heterogeneous computing.

Answer(s): D

2. Which of the following scenarios can the accelerator engine of TaiShan server be applied to? (Multiple choice)

A. Web Services

B. Big data

C. Smart Security

D. Data encryption

Answer(s): A,B,C,D

3. What is the correct statement about data routing and cluster management in the Huawei Fusionstorage architecture? (Multiple choice)

A. When the system starts, MDC and ZK interact to determine MC, and the main MDC and other MDCs monitor each other's heartbeats. The master MDC decides who will take over after a certain MDC fails. Other MDC found that the main MDC was faulty and interacted with zk as the main MDC.

B. Distributed storage system writes data. According to the LBA from the application layer and the block size, the VBS generates multiple Keys in units of 1MB, hashes the Keys into Partition IDs, and then follows up the Partition to find the main OSD, and the main OSD notifies the partition corresponding to the OSD to start writing data.

C. Query the main MDC when VBS starts and register with the main MDC.

D. When the distributed storage system is created, N Partitions are generated in the space of 2 to the 32th power, and the backup OSD starting write data corresponding to the Partition is generated according to the distribution of the disk.

E. When the OSD starts, it queries the MDC from the MDC, reports the status to the home MDC, and the home MDC sends the status change to the VBS. When the home MDC fails, the master MDC designates one MDC to take over, and at most two pools belong to one MDC.

Answer(s): A,B,C,E

4. Memory Large pages use larger paging space, which can effectively reduce page table entries and support memory swapping.

A. False

B. True

Answer(s): B

5. Which role does Huawei or the company participate in the chip industry chain?

A. Chip packaging and testing

B. Terminal application

C. Chip manufacturing

D. Chip design

Answer(s): D

6. The system administrator A wants to use the vmstat command to view the active memory and inactive memory of EulerOS. Which of the following commands can achieve this purpose?

A. vmstat -f

B. vmstat -s

C. vmstat -d

D. vmstat -a

Answer(s): D

7. The network of Huawei Atlas800 deep learning system is divided into two planes, namely the business plane and the storage plane. The two planes are deployed in a physically separated manner to ensure the security of the business and storage network.

A. False

B. True

Answer(s): B

8. The development of bus technology, PC/XT -> ISA bus -> Extended ISA bus -> AGP bus -> PCI bus -> PCI-Express bus.

A. False

B. True

Answer(s): A

9. The company deployed Huawei eService software, which of the following content can eService predictive intelligence predict? (Multiple choice)

A. Forecast the capacity trend in the next 12 months.

B. Risk plate identification

C. Detect abnormal performance and make analysis recommendations.

D. Performance prediction. Predict performance trends in the next 2 months.

Answer(s): A,B,C,D

10. An Internet company purchased a batch of TaiShan servers to build a Web system. The typical data flow of the entire Web system planning is: The client initiates a request -> load balancing for data forwarding -> application data to provide data services -> database server for back-end storage.

A. False

B. True

Answer(s): B

11. An Internet company purchases a batch of TaiShan servers to build a Web system. C/S and B/S two architectures are available. Which of the following statement about the two architectures is correct?

A. The B/S architecture can make full use of the advantages of the hardware environment at both ends, and reasonably allocate tasks to the client and server to achieve this, reducing the communication overhead of the system.

B. Under the C/S architecture, the user interface is realized through the www browser, and very few things logic is realized on the front end (browser), but the main thing logic is realized on the server side, forming the so-called 3-tier structure.

C. Compared with the B/S architecture, the C/S architecture puts less pressure on the server.

D. Compared with B/S, C/S architecture has the advantages of no need to install, easy to maintain, etc.

Answer(s): C

12. What are the types of optical fiber connected optical modules according to the packaging form? (Multiple choice)

A. SFP28

B. SFP

C. SFP+

Answer(s): A,B,C

13. Intelligent network card uses LDPC error correction algorithm to achieve high reliability of data.

A. False

B. True

Answer(s): A

14. Which of the following statement about the function of the FusionDirector software management version is wrong?

A. Version matching management

B. Independent out-of-band channel upgrade does not occupy business bandwidth.

C. Operation and maintenance engineers need to manually download firmware, manually upload firmware and manually upgrade firmware through the platform.

D. Automatically download, automatically detect the firmware, driver and OS version of different models of servers and comprehensively manage the firmware version.

Answer(s): C

15. Which of the following description about the BIOS operating process is correct?

A. Power on>Hardware initialization>CPU load BIOS>POST power-on hardware self-check>Load boot items>Process system commands

B. Power on>Hardware initialization>CPU load BIOS>Load boot items>POST boot hardware self-check>Process system commands

C. Power on>CPU load BIOS>Hardware initialization>POST boot hardware self-check>Load boot items>Process system commands

D. Power on>CPU load BIOS>Hardware initialization>Load boot items>POST boot hardware self-check>Process system commands

Answer(s): C

16. A system constructed by one or several general computing units plus one or several dedicated computing units is a heterogeneous computing system, and the calculation method for a heterogeneous computing system to perform general tasks is heterogeneous computing.

A. False

B. True

Answer(s): B

17. ARM microprocessors have been popularized in industrial control, consumer electronics, communication systems, network systems, wireless systems and other product markets. Which of the following descriptions of the characteristics of the ARM architecture is wrong?

A. A large number of registers are used, and most data operations are completed in the registers, and the instruction execution speed is faster.

B. The same function and performance occupy a small chip area, low power consumption, higher integration, and more hardware CPU cores.

C. It supports 16-bit, 32-bit, and 64-bit multiple instruction sets, and is well compatible with various application scenarios from OT, terminal to cloud.

D. Adopt a complex instruction set. High processing efficiency

Answer(s): D

18. Which of the following about the understanding of Nginx are correct? (Multiple choice)

A. Nginx works on the seventh layer of the network, so he can make a diversion strategy for the Http application itself.

B. Nginx is less dependent on the network. In theory, as long as Ping is connected and the web page is accessed normally, Nginx can be connected.

C. Nginx is an open source load balancing strategy based on Linux. Its advantage is that it has good performance and can pay more than 10,000 concurrency.

Answer(s): A,B,C

19. Which of the following processors belongs to the RISC instruction set architecture? (Multiple choice)

A. ARM

B. X86

C. MIPS

D. PowerPC

Answer(s): A,C,D

20. Software is a series of computer data and instructions executed in a specific order.

A. Computer software is divided into system software and application software and middleware between the two.

B. Application software is software developed for a specific purpose.

C. Middleware is the software that provides the connection between system software and application software.

D. The system software is responsible for managing each independent hardware in the computer system, providing a platform for the running application software, and adapting to different application software.

Answer(s): D
