**AI Data Considerations Pre-Assessment**

Question 1

What is a benefit of RoCE compared to traditional InfiniBand?

Parte superior do formulário

* lower latency
* requires a dedicated network
* higher throughput
* utilizes existing Ethernet infrastructure

Parte inferior do formulário

Question 2

Which two are benefits of using RDMA in AI/ML clusters? (Choose two.)

Parte superior do formulário

* reduced latency
* increased CPU overhead
* direct memory-to-memory data transfers
* higher power consumption
* simplified application development
* enhanced data security

Question 3

What is the role of the completion queue (CQ) in RDMA operations?

Parte superior do formulário

* to send data to a remote node
* to receive data from a remote node
* to track the completion of work requests
* to register memory regions

Parte inferior do formulário

Question 4

Which congestion management technique is recommended for maintaining a lossless Ethernet fabric in AI/ML networks?

Parte superior do formulário

* simple ECMP hashing
* WRED ECN
* stateless flow placement
* traditional Go-Back-N approach

Parte inferior do formulário

Question 5

What is the primary function of VOQ in high-performance network devices?

Parte superior do formulário

* increase end-to-end latency
* increase packet loss
* manage packet traffic efficiently
* reduce network bandwidth

Parte inferior do formulário

Question 6

Which two components are essential for creating a non-blocking network fabric for AI/ML workloads using Cisco Nexus switches? (Choose two.)

Parte superior do formulário

* Nexus 9200 Series switch
* Nexus 9332D-GX2B switch
* Nexus 93600CD-GX switch
* Nexus 9400 Series switch
* Nexus 9500 Series switch

Question 7

Which mechanism manages queue lengths by dropping lower-priority packets before the queue becomes full?

Parte superior do formulário

* LLQ
* WRED
* traffic shaping
* classification

Parte inferior do formulário

Question 8

What are two mechanisms that are used for congestion avoidance in Cisco Nexus 9000 Series switches? (Choose two.)

Parte superior do formulário

* WRED
* traffic shaping
* AFD
* classification
* PFC
* queuing and scheduling

Question 9

What is the primary benefit of using ECN in a network?

Parte superior do formulário

* to classify traffic based on port number
* to provide explicit congestion notifications
* to prioritize real-time traffic
* to smooth out traffic bursts

Question 10

What is the primary impact of poor load balancing and packet drops on AI/ML clusters?

Parte superior do formulário

* increased job completion time (JCT)
* reduced data transmission rate
* increased packet marking with ECN bits
* reduced need for PFC

Parte inferior do formulário

Question 11

Which two features of Cisco Nexus Dashboard Insights are beneficial for monitoring congestion and performance in AI/ML cluster networks? (Choose two.)

Parte superior do formulário

* real-time troubleshooting
* packet duplication detection
* congestion score monitoring
* jitter analysis
* latency score monitoring
* packet encryption analysis

Question 12

Which phase of the AI/ML workflow is characterized by high bandwidth and computational resource requirements?

Parte superior do formulário

* training
* inferencing
* model deployment
* data collection

Parte inferior do formulário

Question 13

Which technique is used to handle missing data during preprocessing?

Parte superior do formulário

* data augmentation
* data discretization
* data interpolation
* data scaling

Parte inferior do formulário

Question 14

What is the role of feature engineering in the data preparation process?

Parte superior do formulário

* to collect raw data
* to label data samples
* to transform raw data into features for model training
* to store data in databases

Question 15

What is the primary purpose of data preparation in AI?

Parte superior do formulário

* to collect as much data as possible
* to eliminate the need for data labeling
* to reduce the size of the dataset
* to transform raw data into a structured format

Parte inferior do formulário

Question 16

What is the primary purpose of utilizing Cisco Nexus Dashboard Insights (NDI) in AI/ML workload environments?

Parte superior do formulário

* to simplify the process of server expansion
* to decrease the cost of high-performance computing hardware
* to detect and preemptively address network congestion
* to reduce the physical space required for network hardware

Parte inferior do formulário

Question 17

How does explicit congestion notification (ECN) help in managing network traffic?

Parte superior do formulário

* by increasing network bandwidth
* by alerting devices of congestion without dropping packets
* by automatically upgrading network hardware
* by reducing the number of active connections

Parte inferior do formulário

Question 18

Which of the following describes a benefit of using a spine-leaf topology?

Parte superior do formulário

* It limits the number of devices that can be added to the network.
* It reduces the need for network security protocols.
* It simplifies the physical layout of server hardware.
* It provides a non-blocking architecture ideal for data-intensive applications.

Parte inferior do formulário

Parte inferior do formulário