



Up-to-date Questions and Answers from authentic resources to improve knowledge and pass the exam at very first attempt. ----- Guaranteed.



4A0-113 MCQs
4A0-113 TestPrep
4A0-113 Study Guide
4A0-113 Practice Test
4A0-113 Exam Questions



killexams.com

Nokia

4A0-113

Nokia OSPF Routing Protocol 2025

ORDER FULL VERSION

<https://killexams.com/pass4sure/exam-detail/4A0-113>



Question: 764

In an OSPF network, if an ABR is configured to summarize routes using the command `area <area-id> range <summary-address> <subnet-mask>`, what is the expected behavior of this configuration?

- A. It aggregates multiple routes into a single summary route to reduce the size of OSPF routing updates
- B. It restricts all routes from the specified area to be filtered out
- C. It allows all routes from the specified area to be sent to the backbone area
- D. It configures the area as a Totally Stubby area automatically

Answer: A

Explanation: The command `area <area-id> range <summary-address> <subnet-mask>` aggregates multiple routes into a single summary route, helping to minimize the size of OSPF routing updates and improve efficiency.

Question: 765

Which mechanism does OSPF use to maintain loop-free routing in its topology?

- A. Split horizon
- B. Route poisoning
- C. Dijkstra's algorithm
- D. Distance vector routing

Answer: C

Explanation: OSPF uses Dijkstra's algorithm, also known as the shortest path first (SPF) algorithm, to ensure loop-free routing within its topology by calculating the most efficient path to each destination.

Question: 766

In the context of OSPF, what does the term "synchronized" refer to regarding the link-state databases of neighboring routers?

- A. Both routers have identical routing tables.
- B. Both routers have exchanged hello packets successfully.
- C. Both routers have matching LSDB entries and sequence numbers.
- D. Both routers have established a full adjacency state.

Answer: C

Explanation: "Synchronized" in OSPF refers to both routers having matching link-state database entries and sequence numbers, ensuring they have the same view of the network topology.

Question: 767

In OSPF, which of the following best describes the purpose of the OSPF Type 3 LSA, known as the Network LSA?

- A. To summarize routes from one area to another.
- B. To provide information about the routes learned from external sources.
- C. To advertise the presence of a multi-access network and its attached routers.
- D. To indicate the routing state of a specific link.

Answer: C

Explanation: The OSPF Type 3 LSA (Network LSA) is used to advertise the presence of a multi-access network and the routers attached to it. This LSA is crucial for establishing the topology of the network and ensuring proper routing decisions.

Question: 768

Which command would you use to display the OSPF neighbor table along with the state of each neighbor on a Nokia router?

- A. show ip ospf neighbor
- B. display ip ospf neighbor
- C. show ospf database
- D. display ospf neighbors

Answer: B

Explanation: The command display ip ospf neighbor provides a detailed view of the OSPF neighbor table, including the state of each neighbor, which is crucial for troubleshooting OSPF adjacency issues.

Question: 769

Which OSPF feature allows routers to maintain a logical connection between two areas to facilitate communication across disjoint networks?

- A. OSPF route redistribution
- B. OSPF area summarization
- C. OSPF virtual link
- D. OSPF stub area configuration

Answer: C

Explanation: OSPF virtual links allow routers to maintain a logical connection between two areas, enabling communication across disjoint networks while ensuring proper routing continuity.

Question: 770

In OSPF, what is the primary function of the "Link State Request" (LSR) message during the database synchronization process?

- A. To acknowledge the receipt of LSAs from neighboring routers.
- B. To advertise the router's current link state to all neighbors.
- C. To request specific LSAs that the router does not currently have.
- D. To initiate the OSPF adjacency formation process.

Answer: C

Explanation: The Link State Request (LSR) message is used by OSPF routers to request specific LSAs from their neighbors that they do not currently possess, facilitating database synchronization.

Question: 771

What is the primary purpose of Link-local interface addresses in OSPFv3?

- A. They provide a globally unique address for routing.
- B. They enable routers to communicate via a non-routable address locally.
- C. They facilitate the exchange of routing information across multiple hops.
- D. They are used to identify network segments in a multi-access network.

Answer: B

Explanation: Link-local interface addresses are used for local communication between nodes on the same link and are not routable beyond that link, making them suitable for OSPFv3 operations.

Question: 772

What is the expected behavior of OSPF when a new router joins an established OSPF area?

- A. The new router will automatically become the Designated Router.
- B. It will send a full database request to all existing routers.
- C. It will start sending hello packets to establish adjacency.
- D. The existing routers will ignore the new router until it is configured.

Answer: C

Explanation: When a new router joins an established OSPF area, it begins by sending hello packets to establish neighbor adjacencies with existing routers.

Question: 773

When OSPF is configured on a router, which of the following tasks is performed during the initial OSPF neighbor adjacency establishment process?

- A. The router sends a Database Description (DBD) packet to its neighbors to summarize the LSAs it holds.
- B. The router immediately updates its routing table upon receiving Hello packets from neighbors.
- C. The router begins to flood its LSAs to all other routers in the OSPF area without establishing adjacencies.
- D. The router generates a Link-State Update (LSU) packet to advertise its routing table to all OSPF neighbors.

Answer: A

Explanation: During the initial neighbor adjacency establishment, the router sends a Database Description (DBD) packet to summarize its LSAs, facilitating the synchronization of the OSPF databases.

Question: 774

In OSPF, which type of LSA is generated by routers to describe their directly connected networks?

- A. Network LSA
- B. Summary LSA
- C. Router LSA
- D. ASBR Summary LSA

Answer: C

Explanation: A Router LSA (Type 1 LSA) is generated by routers to advertise their directly connected networks and their associated metrics.

Question: 775

When redistributing routes, which command can be used to set a specific metric for the redistributed routes in OSPF?

- A. redistribute ospf 1 metric 20
- B. route-map set-metric
- C. default-metric 20
- D. redistribute connected metric-type 2

Answer: C

Explanation: The default-metric command is used to set a specific metric for redistributed routes, ensuring consistency in route selection criteria across different routing protocols.

Question: 776

To configure a static route to reach the network 203.0.113.0/24 via a next-hop of 198.51.100.1, which command is appropriate on a Nokia 7750 SR?

- A. ip route 203.0.113.0 255.255.255.0 198.51.100.1
- B. static-route 203.0.113.0/24 next-hop 198.51.100.1
- C. route 203.0.113.0/24 via 198.51.100.1
- D. static-route 203.0.113.0 255.255.255.0 next-hop 198.51.100.1

Answer: B

Explanation: The command "static-route 203.0.113.0/24 next-hop 198.51.100.1" correctly establishes a static route to the specified network with the appropriate next-hop address.

Question: 777

What does the OSPF command ip ospf cost achieve in terms of route selection?

- A. It changes the route preference based on interface bandwidth.
- B. It defines the maximum hop count for OSPF routes.
- C. It adjusts the OSPF hello interval for the interface.
- D. It modifies the default cost assigned to all OSPF interfaces.

Answer: A

Explanation: The `ip ospf cost` command adjusts the cost assigned to an interface, influencing OSPF's route selection process based on bandwidth.

Question: 778

How does OSPF ensure reliable delivery of routing updates in a link-state environment?

- A. By using TCP for transmission of all OSPF messages.
- B. OSPF does not guarantee reliable delivery; it is a best-effort protocol.
- C. By periodically sending hello messages to maintain connectivity.
- D. Through the acknowledgment of link-state updates by all routers.

Answer: B

Explanation: OSPF operates as a best-effort protocol and does not guarantee reliable delivery of routing updates, unlike TCP.

Question: 779

Which of the following is TRUE regarding OSPF's handling of route summarization?

- A. OSPF performs automatic route summarization by default at area boundaries.
- B. Route summarization in OSPF can lead to a reduction in the size of the routing table and minimize the number of LSAs propagated.
- C. OSPF allows for summarization of inter-area routes but not external routes.
- D. Manual route summarization can only be configured on ABRs (Area Border Routers) and not on internal routers.

Answer: B

Explanation: Route summarization in OSPF can significantly reduce the routing table size and minimize LSA propagation, enhancing overall network efficiency.

Question: 780

In an OSPF network, what does the term "LSA flooding" refer to?

- A. The process of sending LSAs to all routers in the local area.
- B. The method used to prevent routing loops in OSPF.
- C. The periodic update of router configurations across the network.
- D. The automatic adjustment of OSPF costs based on link usage.

Answer: A

Explanation: LSA flooding refers to the process of sending Link-State Advertisements (LSAs) to all routers in the local area to ensure they have the latest topology information.

Question: 781

What is the primary difference between OSPFv2 and OSPFv3 regarding network layer integration?

- A. OSPFv3 supports only IPv4, while OSPFv2 supports both IPv4 and IPv6.
- B. OSPFv2 uses link-local addresses for neighbor discovery, while OSPFv3 uses global addresses.
- C. OSPFv3 is designed for IPv6 only and employs the use of link-local addresses for neighbor discovery and communication.
- D. OSPFv2 allows for more area types compared to OSPFv3.

Answer: C

Explanation: OSPFv3 is specifically designed for IPv6 networks and utilizes link-local addresses for neighbor discovery, differentiating it from OSPFv2, which is limited to IPv4.

Killexams.com is a leading online platform specializing in high-quality certification exam preparation. Offering a robust suite of tools, including MCQs, practice tests, and advanced test engines, Killexams.com empowers candidates to excel in their certification exams. Discover the key features that make Killexams.com the go-to choice for exam success.



Exam Questions:

Killexams.com provides exam questions that are experienced in test centers. These questions are updated regularly to ensure they are up-to-date and relevant to the latest exam syllabus. By studying these questions, candidates can familiarize themselves with the content and format of the real exam.

Exam MCQs:

Killexams.com offers exam MCQs in PDF format. These questions contain a comprehensive collection of questions and answers that cover the exam topics. By using these MCQs, candidate can enhance their knowledge and improve their chances of success in the certification exam.

Practice Test:

Killexams.com provides practice test through their desktop test engine and online test engine. These practice tests simulate the real exam environment and help candidates assess their readiness for the actual exam. The practice test cover a wide range of questions and enable candidates to identify their strengths and weaknesses.

Guaranteed Success:

Killexams.com offers a success guarantee with the exam MCQs. Killexams claim that by using this materials, candidates will pass their exams on the first attempt or they will get refund for the purchase price. This guarantee provides assurance and confidence to individuals preparing for certification exam.

Updated Contents:

Killexams.com regularly updates its question bank of MCQs to ensure that they are current and reflect the latest changes in the exam syllabus. This helps candidates stay up-to-date with the exam content and increases their chances of success.