

1. A \_\_\_\_\_ is a device that forwards data that is not explicitly destined to it.

- A. hub
- B. switch
- C. router
- D. All of the above

View Answer

Ans : C

Explanation: A router is a device that forwards data that is not explicitly destined to it.

2. There exists \_\_\_\_\_ forms of routing protocols.

- A. 1
- B. 2
- C. 3
- D. 4

View Answer

Ans : B

Explanation: There exists two forms of routing protocols : Distance Vector Routing Protocol and Link-State Routing Protocol

3. Routing protocols can be divided in \_\_\_\_\_ categories.

- A. 2
- B. 3
- C. 4
- D. 5

View Answer

Ans : A

Explanation: Routing protocols can be divided in two categories : Interior Routing Protocol and Exterior Routing Protocol.

4. RIPng stands for \_\_\_\_\_.

- A. Routing Information Path Next Generation
- B. Routing Interior Protocol Next Generation
- C. Routing Information Protocol Next Gateway
- D. Routing Information Protocol Next Generation

View Answer

Ans : D

Explanation: RIPng stands for Routing Information Protocol Next Generation.

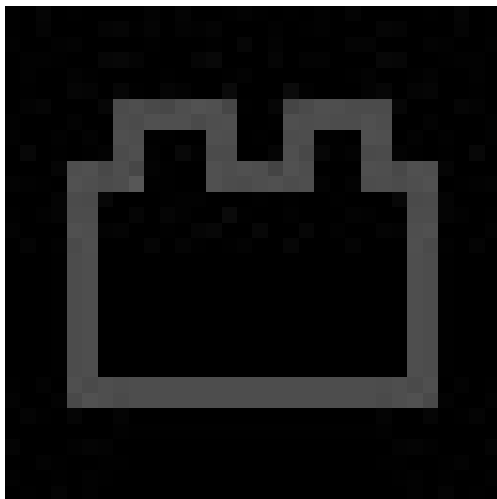
5. An \_\_\_\_\_ distributes routing information between two different autonomous systems or organization.

- A. Interior Routing Protocol
- B. Exterior Routing Protocol
- C. Link-State Routing Protocol
- D. Distance Vector Routing Protocol

View Answer

Ans : B

Explanation: An Exterior Routing Protocol distributes routing information between two different autonomous systems or organization. Examples: BGP.



6. \_\_\_\_\_ is an upgraded implementation of ICMP to accommodate IPv6 requirements.

- A. ICMPv6
- B. DHCPv6
- C. DNS
- D. None of the above

View Answer

Ans : A

Explanation: ICMPv6: Internet Control Message Protocol version 6 is an upgraded implementation of ICMP to accommodate IPv6 requirements.

7. Which type of Ethernet framing is used for TCP/IP and DEC net?

- A. Ethernet 802.3
- B. Ethernet 802.2
- C. Ethernet II
- D. Ethernet SNAP

View Answer

Ans : C

Explanation: The Ethernet 802.3 framing is used for NetWare versions 2 to 3.11, and the Ethernet 802.2 framing is used for NetWare versions 3.12 and later plus OSI routing, Ethernet II is used with TCP/IP and DEC net, and Ethernet SNAP is used with TCP/IP and AppleTalk. The type field in Ethernet 802.2 frame is replaced by a length field in Ethernet 802.3.

8. Which NetWare protocol works on layer 3—network layer—of the OSI model?

- A. IPX
- B. NCP
- C. SPX
- D. NetBIOS

View Answer

Ans : A

Explanation: IPX (Internetwork Packet Exchange) is the NetWare network layer 3 protocol used for transferring information on LANs that use Novell's NetWare.

9. Which NetWare protocol provides link-state routing?

- A. RIP
- B. SAP
- C. NCP
- D. NLSP

View Answer

Ans : D

Explanation: NetWare Link Services Protocol (NLSP) provides link-state routing. SAP (Service Advertisement Protocol) advertises network services. NCP (NetWare Core Protocol) provides client-to-server connections and applications. RIP is a distance vector routing protocol. NLSP was developed by Novell to replace RIP routing protocols.

10. A Distance Vector router running distance vector protocol advertises its connected routes and learns new routes from its neighbors.

- A. Yes
- B. No
- C. Can be yes or no
- D. Can not say

View Answer

Ans : A

Explanation: Yes, A router running distance vector protocol advertises its connected routes and learns new routes from its neighbors.

## **Answers of the following are below**

1) Which of the following is not the requirement of routing function?

- A. Correctness
- B. Robustness
- C. Delay time
- D. Stability

2) The ..... protocol allows the administrator to assign a cost, called the metric, to each route.

- A. OSPF
- B. RIP
- C. BGP
- D. BBGP

3) If there is only one routing sequence for each source destination pair, the scheme is known as .....

- A. static routing
- B. fixed alternative routing
- C. standard routing
- D. dynamic routing

4) The Open Shortest Path First(OSPF) protocol is an intra domain routing protocol based on ..... routing.

- A. distance vector
- B. link state
- C. path vector
- D. non distance vector

5) An/A .....routing scheme is designed to enable switches to react to changing traffic patterns on the network.

- A. static routing
- B. fixed alternative routing
- C. standard routing
- D. dynamic routing

6) The Routing Information Protocol(RIP) is an intra domain routing based on .....routing.

- A. distance vector
- B. link state
- C. path vector
- D. distance code

7) The term ..... refers to which node or nodes in the network are responsible for the routing decision.

- A. decision place
- B. routing place
- C. node place
- D. switching place

8) In ..... routing the least cost route between any two nodes is the minimum distance.

- A. path vector
- B. distance vector
- C. link state

D. switching

9) For centralized routing the decision is made by some designated node called .....

A. designated center

B. control center

C. network center

D. network control center

10) For purposes of routing, the Internet is divided into .....

A. wide area networks

B. autonomous networks

C. local area networks

D. autonomous system

11) In ..... a route is selected for each destination pair of nodes in the network.

A. flooding

B. variable routing

C. fixed routing

D. random routing

12) To create a neighborhood relationship, a router running BGP sends an ..... message.

A. open

B. update

c. keep alive

D. close

13) The technique which requires no network information required is ....

A. flooding

- B. variable routing
- C. fixed routing
- D. random routing

14) An area is ....

- A. part of an AS
- B. composed of at least two AS
- C. another term for an AS
- D. composed more than two AS

15) Which of the following produces high traffic network?

- A. Variable routing
- B. Flooding
- C. Fixed routing
- D. Random routing

16) In ..... routing, we assume that there is one node (or more) in each autonomous system that acts on behalf of the entire autonomous system.

- A. distant vector
- B. path vector
- C. link state
- D. multipoint

17) When a direct delivery is made, both the deliverer and receiver have the same ....

- A. routing table
- B. host id
- C. IP address
- D. Net id

18) In OSPF, a ..... link is a network with several routers attached to it.

A. point-to-point

B. transient

C. stub

D. multipoint

19) In ..... routing, the mask and the destination address are both 0.0.0.0 in routing table.

A. next-hop

B. host-specific

C. network-specific

D. default

20) In ..... the router forwards the receive packet through only one of its interfaces.

A. unicasting

B. multicasting

C. broadcasting

D. point to point

**Answers:**

1) C. Delay time

2) A. OSPF

3) B. fixed alternative routing

4) B. link state

5) C. standard routing

6) A. distance vector

7) A. decision place

8) B. distance vector

9) D. network control center

10) D. autonomous system

11) C. fixed routing

12) B. update

13) A. flooding

14) A. part of an AS



- 15) B. Flooding
- 16) B. path vector
- 17) D. Net id
- 18) B. transient
- 19) D. default
- 20) B. multicasting

## Dijkstra's Algo

1. Dijkstra's Algorithm is used to solve \_\_\_\_\_ problems.

- a) All pair shortest path
- b) Single source shortest path
- c) Network flow
- d) Sorting

View Answer

Answer: b

Explanation: Dijkstra's Algorithm is used for solving single source shortest path problems. In this algorithm, a single node is fixed as a source node and shortest paths from this node to all other nodes in graph is found.

2. Which of the following is the most commonly used data structure for implementing Dijkstra's Algorithm?

- a) Max priority queue
- b) Stack
- c) Circular queue
- d) Min priority queue

View Answer

Answer: d

Explanation: Minimum priority queue is the most commonly used data structure for implementing Dijkstra's Algorithm because the required operations to be performed in Dijkstra's Algorithm match with specialty of a minimum priority queue.

3. What is the time complexity of Dijkstra's algorithm?

- a)  $O(N)$
- b)  $O(N^3)$
- c)  $O(N^2)$
- d)  $O(\log N)$

View Answer

Answer: c

Explanation: Time complexity of Dijkstra's algorithm is  $O(N^2)$  because of the use of doubly nested for loops. It depends on how the table is manipulated.

**Note: Join free Sanfoundry classes at [Telegram](#) or [Youtube](#)**

4. Dijkstra's Algorithm cannot be applied on \_\_\_\_\_

- a) Directed and weighted graphs
- b) Graphs having negative weight function
- c) Unweighted graphs
- d) Undirected and unweighted graphs

View Answer

Answer: b

Explanation: Dijkstra's Algorithm cannot be applied on graphs having negative weight function because calculation of cost to reach a destination node from the source node becomes complex.

5. Dijkstra's Algorithm is the prime example for \_\_\_\_\_

- a) Greedy algorithm
- b) Branch and bound
- c) Back tracking
- d) Dynamic programming

View Answer

Answer: a

Explanation: Dijkstra's Algorithm is the prime example for greedy algorithms because greedy algorithms generally solve a problem in stages by doing what appears to be the best thing at each stage.