A. Provide uninterrupted forwarding service.
B. Police traffic that is sent to the edge of the network.
C. Provide direct connectivity for end user devices.
D. Ensure timely data transfer between layers.
E. Inspect packets for malicious activity.

Correct Answer: AD
Explanation:
Cisco is very clear about the purpose of this layer. Its only role is to forward traffic, the fastest it can. Here you don't apply any policy, as you must try to reduce the load of the core so it can focus on routing.

https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Campus/campover.html#wp708831

QUESTION 14
Router R1 must send all traffic without a matching routing-table entry to 192.168.1.1. Which configuration accomplishes this task?

```
R1#Config t
  R1(config)#ip routing
  R1(config)#ip route default-route 192.168.1.1

R1#Config t
  R1(config)#ip routing
  R1(config)#ip route 192.168.1.1 0.0.0.0 0.0.0.0

R1#Config t
  R1(config)#ip routing
  R1(config)#ip route 0.0.0.0 0.0.0.0 192.168.1.1

R1#Config t
  R1(config)#ip routing
  R1(config)#ip default-gateway 192.168.1.1
```

A. Option A
B. Option B
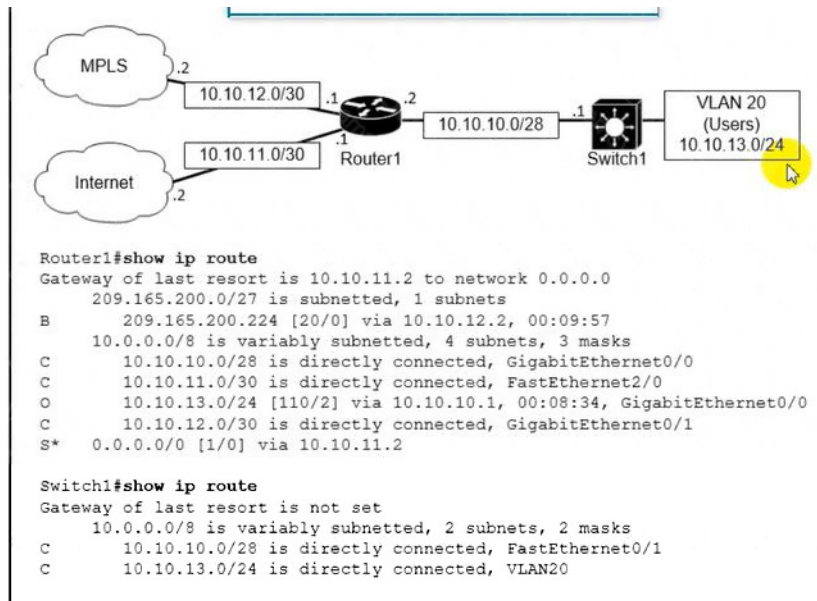C. Option C
D. Option D

Correct Answer: C

QUESTION 15
What is a role of wireless controllers in an enterprise network?

A. centralize the management of access points in an enterprise network
B. support standalone or controller-based architectures
C. serve as the first line of defense in an enterprise network
D. provide secure user logins to devices on the network.

Correct Answer: A

QUESTION 16
Refer to the exhibit. which path is used by the router for internet traffic?

```
Router1#show ip route
Gateway of last resort is 10.10.11.2 to network 0.0.0.0
      209.165.200.0/27 is subnetted, 1 subnets
B       209.165.200.224 [20/0] via 10.10.12.2, 00:09:57
      10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C       10.10.10.0/28 is directly connected, GigabitEthernet0/0
C       10.10.11.0/30 is directly connected, FastEthernet2/0
O       10.10.13.0/24 [110/2] via 10.10.10.1, 00:08:34, GigabitEthernet0/0
C       10.10.12.0/30 is directly connected, GigabitEthernet0/1
S*   0.0.0.0/0 [1/0] via 10.10.11.2

Switch1#show ip route
Gateway of last resort is not set
      10.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       10.10.10.0/28 is directly connected, FastEthernet0/1
C       10.10.13.0/24 is directly connected, VLAN20
```

A. 209.165.200.0/27
B. 10.10.10.0/28
C. 0.0.0.0/0
D. 10.10.13.0/24

Correct Answer: C

QUESTION 17
Which command enables a router to become a DHCP client?

A. ip address dhcp
B. ip helper-address
C. ip dhcp pool
D. ip dhcp client

Correct Answer: A
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/12-4/dhcp-12-4-book/config-dhcp-client.html

If we want to get an IP address from the DHCP server on a Cisco device, we can use the command "ip address dhcp".

Note:
The command "ip helper-address" enables a router to become a DHCP Relay Agent.

QUESTION 18
A frame that enters a switch fails the Frame Check Sequence. Which two interface counters are incremented? (Choose two)

A. runts
B. giants
C. frame
D. CRC
E. input errors

Correct Answer: DE
Explanation:
Whenever the physical transmission has problems, the receiving device might receive a frame whose bits have changed values. These frames do not pass the error detection logic as implemented in the FCS field in the Ethernet trailer. The receiving device discards the frame and counts it as some kind of input error.

Cisco switches list this error as a CRC error. Cyclic redundancy check (CRC) is a term related to how the FCS math detects an error.

The "input errors" includes runts, giants, no buffer, CRC, frame, overrun, and ignored counts.

The output below show the interface counters with the "show interface s0/0/0" command:

```
Router#show interface s0/0/0
Serial0/0/0 is up, line protocol is up
  Hardware is M4T
  Description: Link to R2
  Internet address is 10.1.1.1/30
  MTU 1500 bytes, BW 1544 Kbit, DLY 20000 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  --output omitted--
  5 minute output rate 0 bits/sec, 0 packets/sec
     268 packets input, 24889 bytes, 0 no buffer
     Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
     251 packets output, 23498 bytes, 0 underruns
     0 output errors, 0 collisions, 0 interface resets
     0 output buffer failures, 0 output buffers swapped out
     0 carrier transitions    DCD=up  DSR=up  DTR=up  RTS=up  CTS=up
```

QUESTION 19
If a notice-level messaging is sent to a syslog server, which event has occurred?

A. A network device has restarted
B. An ARP inspection has failed
C. A routing instance has flapped
D. A debug operation is running

Correct Answer: C
Explanation:
Usually no action is required when a route flaps so it generates the notification syslog level message (level 5).

QUESTION 20
Refer to the exhibit. Which command provides this output?

```
Router#
Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge
            S - Switch, H - Host, I - IGMP, r - Repeater, P - Phone,
            D - Remote, C - CVTA, M - Two-port Mac Relay

Device ID   Local Intrfce Holdtme Capability Platform Port ID
10.1.1.2    Gig 37/3    176             R I  CPT 600 Gig 36/41
10.1.1.2    Gig 37/1    174             R I  CPT 600 Gig 36/43
10.1.1.2    Gig 36/41   134             R I  CPT 600 Gig 37/3
10.1.1.2    Gig 36/43   134             R I  CPT 600 Gig 37/1
10.1.1.2    Ten 3/2     132             R I  CPT 600 Ten 4/2
10.1.1.2    Ten 4/2     174             R I  CPT 600 Ten 3/2
```

A. show ip route
B. show ip interface
C. show interface
D. show cdp neighbor

Correct Answer: D

QUESTION 21
In which two ways does a password manager reduce the chance of a hacker stealing a users password? (Choose two.)

A. It automatically provides a second authentication factor that is unknown to the original user.
B. It uses an internal firewall to protect the password repository from unauthorized access.
C. It protects against keystroke logging on a compromised device or web site.
D. It stores the password repository on the local workstation with built-in antivirus and anti-malware functionality
E. It encourages users to create stronger passwords.

Correct Answer: CE

QUESTION 22
Which mode allows access points to be managed by Cisco Wireless LAN Controllers?

A. autonomous
B. lightweight
C. bridge
D. mobility express

Correct Answer: B
Explanation:
https://www.cisco.com/c/en/us/support/docs/wireless/aironet-1200-series/70278-lap-faq.html
A Lightweight Access Point (LAP) is an AP that is designed to be connected to a wireless LAN (WLAN) controller (WLC). APs are "lightweight," which means that they cannot act independently of a wireless LAN controller (WLC). The WLC manages the AP configurations and firmware. The APs are "zero touch" deployed, and individual configuration of APs is not necessary.

QUESTION 23
DRAG DROP
Drag and drop the DNS lookup components from the left onto the functions on the right.

cache		local database of address mappings that improves name resolution performance
DNS		service that maps hostnames to IP addresses
domain		disables DNS services on a Cisco device
name resolver		in response to client requests, queries a name server for IP address information
no ip domain-lookup		component of a URL that indicates the location or organization type.

Correct Answer:

cache		domain
DNS		name resolver
domain		no ip domain-lookup
name resolver		DNS
no ip domain-lookup		cache

QUESTION 24
In which situation is private IPv4 addressing appropriate for a new subnet on the network of an organization?

A. There is limited unique address space, and traffic on the new subnet will stay local within the organization.
B. The network has multiple endpoint listeners, and it is desired to limit the number of broadcasts.
C. Traffic on the subnet must traverse a site-to-site VPN to an outside organization.
D. The ISP requires the new subnet to be advertised to the internet for web services.

Correct Answer: A

QUESTION 25
A manager asks a network engineer to advise which cloud service models are used so employees do not have to waste their time installing, managing, and updating software which is only used occasionally Which cloud service model does the engineer recommend?

A. infrastructure-as-a-service