Vendor: Cisco

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Exam Name: Automating and Programming Cisco Enterprise Solutions (ENAUTO)

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Q & As: 59

QUESTION 1
What are two characteristics of RPC API calls? (Choose two.)

A. They can be used only on network devices.
B. They use only UDP for communications.
C. Parameters can be passed to the calls.
D. They must use SSL/TLS.
E. They call a single function or service.

Correct Answer: AC
Explanation:
https://pubs.opengroup.org/onlinepubs/9629399/chap6.htm

QUESTION 2
Which two actions do Python virtual environments allow users to perform? (Choose two.)

A. Simplify the CI/CD pipeline when checking a project into a version control system, such as Git.
B. Efficiently port code between different languages, such as JavaScript and Python.
C. Run and simulate other operating systems within a development environment.
D. Quickly create any Python environment for testing and debugging purposes.
E. Quickly create an isolated Python environment with module dependencies.

Correct Answer: DE
Explanation:
https://realpython.com/python-virtual-environments-a-primer/

QUESTION 3
What are two benefits of leveraging Ansible for automation of Cisco IOS XE Software? (Choose two.)

A. Ansible playbooks are packaged and installed on IOS XE devices for automatic execution when an IOS device reboots.
B. All IOS XE operating systems include Ansible playbooks for basic system administration tasks.
C. It is a device-independent method for automation and can be used with any type of device or operating system.
D. Ansible playbooks can be written from the IOS XE EXEC command line to configure the device itself.
E. It does not require any modules of software except SSH to be loaded on the network device.

Correct Answer: AC
Explanation:
https://developer.cisco.com/learning/modules/intro-ansible-iosxe/ansible-overview/step/4

QUESTION 4

Refer to the exhibit. The task is to create a Python script to display an alert message when a Meraki MX Security Appliance goes down. The exhibit shows sample data that is received. Which Python snippet displays the device name and the time at which the switch went down?

```
return_val=
{
  "alertId": "643451796765672516",
  "alertType": "appliances went down",
  "deviceMac": "e0:55:3d:6c:c1:7a",
  "deviceName: "MX65 c1:7a",
  "deviceSerial": "Q2QN-58EA-XXXX",
  "deviceUrl": "https://n143.meraki.com/Branch-1/n/.../manage/nodes/new_wired_status",
  "networkId": "L_1234567890",
  "networkName": "Branch 1",
  "networkUrl": "https://n143.meraki.com/Branch-1/n/.../manage/nodes/wired_status",
  "occuredAt": "2018-11-10T18:45:20.000000Z",
  "organizationId": "1234567",
  "organizationName": "Meraki Demo",
  "organizationUrl": "https://n143.meraki.com/o/.../manage/organization/overview",
  "sentAt: "2018-11-10T18:50:30.479982Z",
  "SharedSecret": "asdf1234",
  "version": "0.1"
}
```

A.
```
with return_val:
    print("The Switch: "+deviceName+ ",
    went down at: "+occurredAt)
```

B.
```
print("The Switch: "+return_val.deviceName+ ", \
went down at: "+return_val.occurredAt)
```

C.
```
print("The Switch: "+return_val['deviceName']+ ", \
went down at: "+return_val['occurredAt']")
```

D.
```
with items as return_val:
    print("The Switch: "+items.deviceName+ ",
    went down at: "+items.occurredAt)
```

Correct Answer: B

QUESTION 5
Which two features are foundations of a software-defined network instead of a traditional network? (Choose two.)

A. control plane and data plane are tightly coupled
B. build upon a robust software stack
C. requires device by device-level configurations
D. automated through expressed intent to a software controller
E. requires significant physical hardware resources

Correct Answer: BD
Explanation:
In traditional networks, control plane and data plane are coupled tightly. It also requires device by device configurations and of course, it uses physical hardware resources to function. Whereas, SDN is based on a software stack. In Cisco SDNs are automated through expressed intent to a software controller.

QUESTION 6
Refer to the exhibit. The goal is to write a Python script to automatically send a message to an

external messaging application when a rogue AP is detected on the network. The message should include the broadcast SSID that is in the alert.


```
{
  "alertData": {
    "countNode": 1,
      "bssids": [
       "aa:bb:cc:dd:ee:ff",
       "11:22:33:44:55:66"
      ],
      "minFirstSeen": 1548512334,
      "maxLastSeen": 1548512802,
      "countIsContained": 0,
      "reason": "Seen on LAN",
      "wiredMac": "aa:bb:cc:dd:ee:f0"
  },
  "alertId": "629378047939282802",
  "alertType": "Air Marshal -Roque AP detected",
  "occuredAt": "2019-01-26T14:18:54.000000Z",
  "organizationId": "123456",
  "organizationName": "Organization",
  "organizationUrl": "https://n1.meraki.com/o/.../manage/organization/overview",
  "networkId": "L_123456789012345678",
  "networkName": "Network",
  "networkUrl": "https://n1.meraki.com/.../manage/nodes/list",
  "version": "0.1"
  "SharedSecret": "supersecret",
  "sentAt: "2019-01-26T14:35:20.442869Z",
}
```


A function called "send_to_application" is created, and this is the declaration:

send_to_application(message)

The exhibit also shows the data that is received by the application and stored in the variable return_val. Which Python code completes the task?

A.
```
bssids =return_val["bssids"]
for number in range(return_val["alertData"]["countNode"]):
  send_to_application ("ALERT: detected a bssid on the
  network: "+ return_val["alertData"][bssids][number])
```

B.
```
bssids =return_val["bssids"]
for value in bssids:
  send_to_application ("ALERT: detected a bssid on the
  network: "+value)
```

C.
```
count = retutn_val["alertData"]["countNode"]
bssids =return_val["alertData"][count]["bssids"]
for value in bssids:
  send_to_application ("ALERT: detected a bssid on the
  network: "+value)
```

D.
```
bssids =return_val["alertData"]["bssids"]
for value in bssids:
  send_to_application ("ALERT: detected a bssid on the
  network: "+value)
```

Correct Answer: A
Explanation:
For number in range value is required for the application to send the alert. Bssids are also included.

QUESTION 7
A new project called "device_status" must be stored in a central Git repository called "device_status" with the first file named "device_status.py". The Git repository is created using the account python_programmer. Which set of commands inserts the project into Git? A.

A.
```
git init
git add device status.py
git commit -m "Initial Revision"
git remote add origin \
     https://git.cisco.com/python_programmer/device_status
git push -u origin master
```

B.
```
git init
git remote add origin \
     https://git.cisco.com/python_programmer/device_status
git add device_status.py
git pull
```

C.
```
git init
git remote add origin \
     https://git.cisco.com/python_programmer/device_status
git add device_status.py
git commit -m "Initial Revision"
git pull -u origin master
```

D.
```
git init
git add device_status.py
git remote add python_programmer/device_status
git push
```

Correct Answer: A
Explanation:
https://help.github.com/en/github/importing-your-projects-to-github/adding-an-existing-project-to-github-using-the-command-line

QUESTION 8
What are two characteristics of synchronous calls to APIs? (Choose two.)

A. They can be used only with certain programming languages.