1. Which two statements describe the advantages of using a version control system? (Choose two.)
   1. It allows for branching and merging so that different tasks are worked on in isolation before they are merged into a feature or master branch.
   2. It provides tooling to automate application builds and infrastructure provisioning.
   3. It allows multiple engineers to work against the same code and configuration files and mange differences and conflicts.
   4. It provides a system to track User Stories and allocate to backlogs.
   5. It allows developers to write effective unit tests

Jawaban : A, D

1. Which product provides network controller-level management features?

A. Cisco ISE

B. Cisco DNA Center

C. Cisco UCS Manager

D. Cisco NX-OS

Jawaban : B

1. 

A process on the host wants to access the service running inside this Docker container. Which port is used to make a connection?

A. only outbound connections between 3000 and 5000 are possible

B. port 3000

C. any port between 3000 and 5000

D. port 5000

Jawaban : B

1. Which description of a default gateway is true?

A. It is a security feature that denies certain traffic.

B. It is a device that receives IP packets that have no explicit next-hop in the routing table.

C. It is a feature that translates between public and private addresses.

D. It is a device that receives Layer 2 frames with an unknown destination address

Jawaban : B

1. Which two statements are true about Cisco UCS Manager, Cisco UCS Director, or Cisco Intersight APIs?

(Choose two.)

A. UCS Manager uses JSON to encode API interactions and utilizes Base64-encoded credentials in the HTTP header for authentication.

B. UCS Director API interactions can be XML- or JSON-encoded and require an API key in the HTTP header for authentication.

C. Cisco Intersight uses XML to encode API interactions and requires an API key pair for authentication.

D. UCS Manager API interactions are XML-encoded and require a cookie in the method for authentication.

E. Cisco Intersight API interactions can be encoded in XML or JSON and require an API key in the HTTP header for authentication

Jawaban : B, D

1. On which port does NETCONF

operate by default?

A. 23

B. 443

C. 822

D. 830

Jawaban : D

1. Which device is a system that monitors and controls incoming and outgoing network traffic based on predetermined security roles?

A. router

B. switch

C. load balancer

D. firewall

Jawaban : D

1. Refer to the exhibit



Which Python data structure does my\_json contain?

A. map

B. list

C. json

D. dict

Jawaban : D

1. When a Cisco IOS XE networking device is configured using RESTCONF, what is the default data-encoding method?

A. YANG

B. YAML

C. XML

D. x-form-encoding

Jawaban : C

1. Which two elements are foundational of DevOps? (Choose two.)

A. organizing cross-functional teams over organizational silos

B. designing applications as microservices

C. encouraging containers for the deployment of applications

D. automating over documenting

E. optimizing the cost of infrastructures

Jawaban : A, C

1. In DNS, which record specifies an alias that refers to another name that ultimately resolves to

an IP address?

A. CNAME

B. NS

C. AAA

D. SOA

Jawaban : A

1. Which statement describes the benefit of using functions in programming?

A. Functions ensure that a developer understands the inner logic contained before using them as part of a script or application.

B. Functions create the implementation of secret and encrypted algorithms.

C. Functions allow problems to be split into simpler, smaller groups, and reduce code repetition, which makes the code easier to read.

D. Functions store mutable values within a script or application.

Jawaban : C

1. Which platform is run directly using a hypervisor?

A. bare metal systems

B. virtual machines

C. containers

D. applications

Jawaban : A

1. What are two advantages of version control software? (Choose two.)

A. It supports tracking and comparison of changes in binary format files.

B. It allows new team members to access the current code and history.

C. It supports comparisons between revisions of source code files.

D. It provides wiki collaboration software for documentation.

E. It allows old versions of packaged applications to be hosted on the Internet.

Jawaban : A,C

1. What are two benefits of managing network configuration via APIs? (Choose two.)

A. more security due to locking out manual device configuration

B. configuration on devices becomes less complex

C. eliminates the need of legacy management protocols like SNMP

D. reduction in network changes performed manually

E. increased scalability and consistency of network changes

Jawaban : D, E

1. Refer to the exhibit

Text

Description automatically generated with medium confidence

What is the function of the Python script?

A. Loop through the returned of network devices and, for each device, print the device name and management IP address.

B. Count and print the total number of available devices.

C. For each device that is returned, display the device type and associated management IP address.

D. Iterate over a list of network devices and write all device names and management IP addresses to an output file.

Jawaban : A

1. Which model-driven programmability protocol does Cisco IOS XE Software support?

A. gNMI

B. SOAP

C. SSH

D. CORBA

Jawaban : A

1. Which two types of NAT are used in a network? (Choose two.)

A. routed NAT

B. static NAT

C. multicast NAT

D. normal NAT

E. dynamic NAT

Jawaban : B, E

1. A developer is reviewing a code that was written by a colleague. It runs fine, but there are many lines of code to do a seemingly simple task repeatedly. Which action organizes the code?

A. Refactor the code by removing any unnecessary tests.

B. Reverse engineer and rewrite the code logic.

C. Using functions, rewrite any pieces of code that are repeated.

D. Modify the code to use loops

Jawaban : A

1. Which CI/CD tool is an automation tool used to build, test, and deploy software?

A. Git

B. Gradle

C. Nagios

D. Jenkins

Jawaban : D

1. What are the purpose of the Cisco VIRL software tool?

A. to verify configurations against compliance standards

B. to automate API workflows

C. to simulate and model networks

D. to test performance of an application

Jawaban : C

1. What is the purpose of a MAC address?

A. to uniquely identify a switch in a LAN

B. to uniquely identify a router in a LAN

C. to uniquely identify a network interface in a LAN

D. to uniquely identify a device on the Internet

Jawaban : C

1. Which two NETCONF operations cover the RESTCONF GET operation? (Choose two.)

A. <get>

B. <get-config>

C. <get-update>

D. <modify>

E. <edit>

Jawaban : A, B

1. Which two statements about JSON and XML are true? (Choose two.)

A. The syntax of JSON contains tags, elements, and attributes.

B. XML objects are collections of key-value pairs.

C. JSON objects are collections of key-value pairs.

D. JSON arrays are an unordered set of key-value pairs.

E. The syntax of XML contains tags, elements, and attributes.

Jawaban : C, E

1. Package updates from a local server fail to download. However, the same updates work when a much slower external repository is used. Why are local updates failing?

A. The server is running out of disk space.

B. The internet connection is too slow.

C. The Internet is down at the moment, which causes the local server to not be able to respond.

D. The update utility is trying to use a proxy to access the internal resource

Jawaban : D

1. A network engineer is working on a bash script in order to automate some mundane tasks needed by the department. Why would the engineer add a she-bang (#!) to the top of the script as shown:

#!/bin/bash

1. The script file has specific commands that are preceded by the exclamation mark (!) and should not be executed.
2. The script file has specific commands that are preceded by the pound sign (#) and should not be executed.
3. The commands within the script file are to have the output stored in the /bin/bash directory.
4. The script file has commands that need to be run in the bash shell.

Jawaban : D

1. An international manufacturing company is implementing an industrial internet of things plant infrastructure. The design requires that computing resources are located as close to the user as possible. Which cloud model is suitable for this situation?
2. public
3. edge
4. private
5. hybrid

Jawaban : B

1. What are three tools used by developers for scanning code to check for well-known security issues? (Choose three.)
2. Viptela
3. Brakeman
4. VisualCodeGrepper
5. Docker
6. Bandit
7. VIRL

Jawaban : B,C,E

1. A network engineer is configuring a Jenkins job and finishing with the following script in order to trigger the build:

Text, letter

Description automatically generated

After saving the job, what should the engineer do next?

1. Test the script in Docker.
2. Run the job.
3. Open the Recent Changes option to verify the results of the job.
4. Manually run the samplerunning container.

Jawaban : B

1. What is the purpose of adding salt to the password hashing process?
2. to decrease password complexity
3. to increase the length of a password
4. to make hashed passwords deterministic
5. to create a unique hash for every password

Jawaban : D

1. What is an operational characteristic of the local version control system?
2. It locks a file once it is checked out by a user to prevent modification by others.
3. It pushes a working copy of a file to a main repository after individuals have made changes.
4. It allows multiple individuals to edit a working copy of a file at the same time.
5. It stores a delta of two versions of a file as opposed to the file itself.

Jawaban : D

1. An organization is using the Waterfall methodology for a software development project. In what order are the SDLC phases completed when using this method?
2. requirements and analysis, design, testing, implementation, deployment, maintenance
3. requirements and analysis, design, implementation, testing, deployment, maintenance
4. requirements and analysis, design, implementation, deployment, testing, maintenance
5. requirements and analysis, design, deployment, testing, implementation, maintenance

Jawaban : B

1. In which phase of the SDLC process does the product development team gather feedback from the potential customer on the desired features for the new software?
2. design
3. deployment
4. implementation
5. requirements and analysis

Jawaban : D

1. Which Git command is used to get an initial copy on an existing Git repository for the first time?
2. git add
3. git copy
4. git clone
5. git repo

Jawaban : C

1. A student is learning Python using the interactive interpreter mode. The student issues these commands:

Text, letter

Description automatically generated

Which type of Python structure is created?

1. a method
2. a class
3. a function
4. a module

Jawaban : B

1. How does YAML maintain data-structure hierarchy?
2. braces
3. brackets
4. parenthesis
5. indentation

Jawaban : D

1. Which SDLC phase concludes with a high quality, bug-free, working piece of software that is ready for production?
2. design
3. deployment
4. implementation
5. testing

Jawaban : D

1. Which terminal command can be used to print the Python version number installed on a system?
2. python -h
3. python -i
4. python -V
5. which python

Jawaban : C

1. What are three platforms that the Firepower Management Center can run on in the overall architecture of a large enterprise? (Choose Three.)
   1. On every router
   2. On a wide range of Cisco Devices
   3. In the Secure Operations Center (SOC)
   4. On VMWare VSphere
   5. In an availability zone
   6. On Amazon Web Services (AWS)

Jawaban : B, D, F

1. Which two types of APIs are supported by Cisco Finesse? (Choose two.)
2. AXL
3. REST
4. JavaScript
5. SOAP
6. Python SDK

Jawaban : B, C

1. An engineer is learning how to enable RESTful API access for the Cisco Meraki Dashboard. What is the first step that must be taken in order to use API calls with the Meraki enterprise cloud-managed networking infrastructure service?
2. The Meraki Dashboard API must first be enabled under Organizations > Settings within the GUI.
3. Each cloud-managed organization must specify API access and allow the Meraki Dashboard administrator to employ site-specific APIs.
4. The engineer must first generate an API key by going to the My Profile page within the GUI.
5. A GET request must be created and include header parameters including authentication credentials and the Meraki API URL

Jawaban : A

1. What does the Intersight REST API enable an application developer to access?
2. JavaScript Object Notation
3. Management Information Model
4. IETF Interface
5. Universal Resource Locator

Jawaban : B

1. A student in the DevNet class is learning SDKS and APIS. What is the difference between an API and an SDK?
2. An API is essentially a documented set of URIs, whereas an SDK is a package integrated with code examples and libraries.
3. An API contains the components that have been created for a specific purpose, whereas an SDK is commonly an interface for a service.
4. An API is a tool box that contains multiple SDKs, whereas each SDK allows the creation of software for a specific hardware platform.
5. An API is a software development tool for developing applications, whereas an SDK is a set of protocols for building application software

Jawaban : A

1. Which modeling language is most commonly used for data modeling?
2. Python
3. YAML
4. YANG
5. SQL

Jawaban : C

1. Which field in an 802.1Q Ethernet frame is used by switches to identify VLAN membership of the frame?
2. Tag
3. Data
4. FCS
5. Preamble

Jawaban : A

1. Which two statements are correct if a configured NTP master on a network cannot reach any clock with a lower stratum number? (Choose two.)
2. The NTP master will lower its stratum number.
3. The NTP master will be the clock with 1 as its stratum number.
4. Other systems will be willing to synchronize to that master using NTP.
5. The NTP master will claim to be synchronized at the configured stratum number.
6. An NTP server with a higher stratum number will become the master.

Jawaban : C, D

1. What are three parts of an IPv6 global unicast address? (Choose three.)
2. a global routing prefix that is used to identify the network portion of the address that has been provided by an ISP
3. a global routing prefix that is used to identify the portion of the network address provided by a local administrator
4. an interface ID that is used to identify the local network for a particular host
5. an interface ID that is used to identify the local host on the network
6. a subnet ID that is used to identify networks inside of the local enterprise site

Jawaban : A, D, E

1. What attribute of a NIC would place it at the data link layer of the OSI model?
2. IP address
3. RJ-45 port
4. attached Ethernet cable
5. MAC address
6. TCP/IP protocol stack

Jawaban : D

1. Which protocol automates assignment of IP addresses on a network, and which port number does it use? (Choose two.)
2. DHCP
3. DNS
4. SMB
5. 53
6. 67
7. 80

Jawaban : A, E

1. What are the two types of DevNet Sandboxes? (Choose two.)
2. assigned
3. always-on
4. reserved
5. internal-use only
6. exclusive

Jawaban : B, C

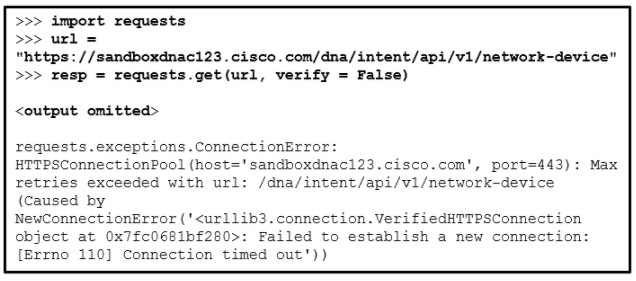
1. A user is developing an application to remotely manage a network device through the API. The features of the API should support the client-server model, JSON or XML data format, and stateless operation. What is an API architecture style that the developer could use?
2. webhook
3. RPC
4. SOAP
5. REST

Jawaban : D

1. A user sends a request to add a loopback interface on a Cisco router through the REST API. Which response status code will the user expect to receive that indicates the request is fulfilled?
2. 200
3. 201
4. 202
5. 203

Jawaban : B

1. Refer to the exhibit. A student is learning Python in the interpret mode. The student enters Python statements and after a while, an error message returns. What is a possible cause for the error?



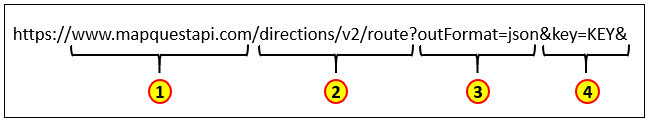
1. The student did not provide the authentication credentials.
2. The host domain name cannot be resolved.
3. The parameter of “verify = False” should be replaced with “verify = True”.
4. The resource on the host is not available.

Jawaban : B

1. Which situation illustrates the use of a webhook application?
2. A user sends a REST API call to a webhook server to poll a predefined data set.
3. Triggered by the operation of a user, a mobile application sends a REST API request to get information from a webhook server.
4. A network automation application queries a router to get CPU and memory usage over a period of time.
5. A developer subscribes to a webhook server for an application so that the application will receive a notification when an event occurs.

Jawaban : D

1. Refer to the exhibit. Which portion of the RESTful request specifies the API that is being requested.



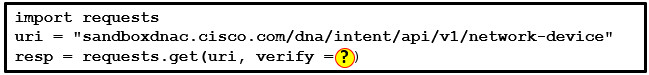
1. 1
2. 2
3. 3
4. 4

Jawaban : B

1. A user is testing an application by sending requests to gather information from a network device through a REST API. The user reviews the API responses and notices an HTTP header string of “Cache-Control: max-age=3600, public”. Which two statements describe the HTTP directive? (Choose two.)
2. The response can be saved in cache and the cached content is open to public access.
3. The client web browser can save the response in the cache and it will expire in an hour.
4. Only responses to requests with the HTTP protocol can be cached.
5. The response may be stored by any cache, even if the response is normally noncacheable.
6. The response can be saved in cache and the information must be refreshed after 60 minutes

Jawaban : B, E

1. Refer to the exhibit. Which parameter is needed in the Python code (in place of the question mark) to test for an invalid URI condition?



1. False
2. True
3. Yes
4. No

Jawaban : A

1. A network engineer has been asked to automate some of the network management and configuration management. The engineer is going to use NETCONF. Why should the engineer consider also using YANG as part of this project?
2. YANG is a documented set of URIs that could be used as part of the deployment.
3. YANG is a set of software development tools that is integrated with vendor-specific configuration libraries.
4. YANG provides a hierarchy of data that can be used for device configuration and operational status retrieval.
5. YANG is used to provide the transport to and from a network device such as a Cisco switch

Jawaban : C

1. The development team in the IT department has decided to implement CI/CD. What are three characteristics of this strategy? (Choose three.)
2. Strategies are used to limit the impact of a possible bad build to users.
3. CI/CD places a higher priority on satisfying the customer needs than does the development plan.
4. The integration and development process goes in one direction and can never go backwards.
5. It is modeled after the software development life cycle and is a more traditional implementation method.
6. The development process attempts to eliminate the problem of application merge conflicts.
7. Automation is part of the creation, verification, and deployment of software.

Jawaban : A, C, F

1. What are two features of the formal code review? (Choose two.)
2. For a quicker turnaround, it involves only one reviewer
3. It involves the developer going through code with the reviewer line-by-line.
4. It promotes discussion among all of the reviewers.
5. It allows the developer to make changes on the spot.
6. It involves a review of the entire code base in a series of meetings

Jawaban : C, E

1. What are two benefits of model-driven programmability in infrastructure automation? (Choose two.)
2. uses human-readable configuration language
3. leverages open-source technology
4. leverages code that is coupled with transport, protocol, and encoding
5. relies on the use of device-specific scripts
6. uses device-specific CLI

Jawaban : A, B

1. A credit union has been growing very rapidly in the past 3 years and the IT department has been struggling to keep up. The department has always been criticized for the time it takes to program and implement change requests. The new CIO has decided to implement CI/CD. What are three benefits of this strategy? (Choose three.)
2. integrates well with Agile software development methods
3. delivers a lot of code in a small amount of time
4. improves quality
5. is less disruptive to future releases
6. is easier to market
7. requires the use of multiple communication tools, thus improving development

Jawaban : A, C, D

1. What two components form the Python-based network device test and validation solution of pyATS?
2. Python and VIRL
3. Python and Genie
4. Python and Puppet
5. Python and Ansible

Jawaban : B

1. What is immutable infrastructure in DevOps?
2. infrastructure that is deployed with all component versions locked except for the ability to perform manual configuration changes
3. infrastructure that is only deployed and maintained in containers
4. infrastructure that is entirely maintained and deployed in code and never subjected to manual changes
5. virtualized infrastructure that is deployed as golden images

Jawaban : C

1. Which security device is used to make requests from multiple computers look like they all come from the same client?
2. stateful firewall
3. forward proxy
4. reverse proxy
5. jump box

Jawaban : B

1. Which term is used to describe an automated process of testing and deploying code?
2. CI/CD
3. OWASP
4. Agile
5. SOAP

Jawaban : A

1. What is a benefit of using a bare metal deployment solution?
2. increased processor and memory resource flexibility
3. direct access to hardware resources for increased efficiency
4. enhanced security
5. addition of an extra layer of abstraction

Jawaban : B

1. What are two benefits of using bare metal software deployment for a large enterprise deploying virtualized servers? (Choose two.)
2. enhanced resource flexibility
3. allocation of separate hardware resources to each application
4. direct access to specialized hardware resources
5. increased application performance
6. isolation of application workloads

Jawaban : C, D

1. An engineer is implementing an edge computing solution where a number of sensors are streaming a large amount data. Where should the computing capability be placed?
2. as close to the WAN edge as possible
3. as close to the internet as possible
4. as close to the network edge as possible
5. as close to the sources of data possible

Jawaban : D

1. What type of attack is being attempted if code similar to this is entered in the login field on a web site?

SELECT REPLACE (User\_Name, ‘administrator’, ‘hacker’) Userlist FROM Credentials;

1. DoS
2. zero day
3. brute force
4. SQL injection

Jawaban : D

1. A student is learning network automation using the DevNet site. Which DevNet resource allows users to search and share their programming skills and experiences?
2. Code Exchange
3. Sandbox
4. Learning Labs
5. Automation Exchange

Jawaban : A

1. A network administrator is evaluating Cisco UCS Manager products to deploy centralized management for the data center. The data center has about 500 physical servers. Which product should the administrator choose?
2. UCS Central (UCSC)
3. Unified Communications Manager (CUCM)
4. UCS Manager (UCSM)
5. Integrated Management Controller (CIMC)

Jawaban : A

1. Which two statements describe the characteristics of the model-driven programmability implemented on Cisco IOS XE? (Choose two.)
2. The configuration command ip http secure-server is required to enable RESTCONF over port 443.
3. Both NETCONF and RESTCONF support running and candidate data stores.
4. RESTCONF is enabled by the configuration command restconf enable .
5. NETCONF connections should be authenticated using AAA credentials.
6. NETCONF connections require that a VPN link be established first.

Jawaban : A, D

1. Which REST API supported by Cisco Unified Communications Manager is designed to enable end users to update and configure personal settings.?
2. UDS API
3. UC Manager Serviceability API
4. Telephony API
5. AXL API

Jawaban : A

1. What is a philosophy associated with the test-driven development process?
2. More than enough code is written to support the application.
3. Failures are expected to occur in order to limit the application code to only what is needed to pass the test.
4. Application code is developed at a slower pace to allow for repetitive testing.
5. Application code should be written before validating system design and tested for functionality as needed.

Jawaban : B