

## MODULE 1

1. What does BASH stand for?
  - ☐ Born Again Shell
  - ☐ Basic Shell
  - ☐ **Bourne Again Shell**
  - ☐ None of the above
2. Which of the following is the best option for displaying your current environment variables?
  - ☐ env | cat >env.txt
  - ☐ **env | more**
  - ☐ export \$ENV | cat
  - ☐ echo env

3. Match the commands with the correct actions.

creates a directory	pwd	^ v
removes a file or directory, or both	touch	^ v
exports variables	rm	^ v
prints the working directory	mkdir	^ v
creates a file	export	^ v

(Creates a directory – mkdir  
Removes a file or directory, or both: rm  
Exports variables: export  
Prints the working directory: pwd  
Creates a file: touch)

4. Which command is used to switch to a code branch from a remote repository in Git?
  - git branch
  - **git checkout**

- git config
- git remote

5. What does the **git add** command do?

- It adds files to the staging area.
- It adds files to a remote repository.
- **It tracks files and adds them to the staging area.**
- It tracks files.

6. A senior developer who is working on the same branch as you has just added a fix for a critical bug to a shared Git repository. Which command should you use to update your working directory and test their code with yours?

- git clone
- git fetch
- **git pull**
- git reset

7. Where can you find code samples?

- on the Cisco XE device
- DevNet Sandbox
- on the Cisco NX-OS device
- **DevNet GitHub community**

8. Which software development methodology is an implementation of the Lean concept in software engineering?

- Extreme Programming
- **Agile**
- Prototyping
- Waterfall

9. If you develop with the TDD, what is the first step you will take when implementing a new feature?

- Run all tests.
- Write app code.
- **Write a test.**
- Refactor code.

10. In which relation is a product backlog to a sprint backlog?

- Work items are typically moved from sprint backlog to product backlog at the sprint start.

- **Work items are typically moved from product backlog to sprint backlog at the sprint start.**
- Product backlog and sprint backlog refer to the same thing.
- Product backlog and sprint backlog have nothing in common; they are used in different development methodologies.

11. Why is the Refactor step required in test-driven development?

- to make tests pass
- to make tests fail at first
- **to improve code quality**
- to implement desired functionality

12. Match the steps in the order that they are performed during test-driven development.

1	Write tests. ×
2	Write code. ×
3	Refactor code. ×

13. When should code review be performed?

- **in every software development project**
- only in large projects
- only where more than three developers work on the same project
- only when critical functionality of the software was modified

## MODULE 2

14. What is the output of the following piece of code?

```
print("a", "b", "c", sep="sep")
```



asepbsepcsep



abc



a b c



asepbsepc

<input type="radio"/>	<code>asepbsepcsep</code>
<input type="radio"/>	<code>abc</code>
<input type="radio"/>	<code>a b c</code>
<input checked="" type="radio"/>	<code>asepbsepc</code>

**15.**An operator able to check whether two values are not equal is coded as:

<input type="radio"/>	<code>!=</code>
<input type="radio"/>	<code>&lt;&gt;</code>
<input type="radio"/>	<code>not ==</code>

☐ `<>`

☒ `!=`

☐ `not ==`

**16.**How many hashes will the following snippet send to the console?

```
for i in range(-1, 1):  
    print("#")
```

☐ two

☐ three

☐ one

☒ two

☐ three

☐ one

17. Take a look at the snippet and choose one of the following statements which is true

```
nums = []  
vals = nums  
vals.append(1)
```

☐ `vals` is longer than `nums`

☐ `nums` and `vals` are of the same length

☐ `nums` is longer than `vals`

☐ `vals` is longer than `nums`

☒ `nums` and `vals` are of the same length

☐ `nums` is longer than `vals`



**18.**How many elements does the my\_list contain?

```
my_list = [0 for i in range(1, 3)]
```

☐ two

☐ three

☐ one

☒ two

☐ three

☐ one

**19.**A function definition starts with the keyword:

☒ fun

☐ function

☐ def



`fun`



`function`



`def`

**20.** Which of the following statements are true? (Select two answers)

---

The `return` keyword forces the function's execution to terminate

---

The `return` keyword forces the function to restart its execution

---

The `return` keyword may cause the function to return a value

---



The `return` keyword forces the function's execution to terminate



The `return` keyword forces the function to restart its execution



The `return` keyword may cause the function to return a value

**21.** Change the "hostname" value from r1 to r2.

```
router1 = {  
    'hostname': 'r1',  
    'ip': '10.0.0.1',  
    'port': 2001,  
    'os': 'cisco-ios-xr',  
    'vendor': 'cisco',  
    'username': 'admin',  
    'password': 'cisco123'  
}
```

..... = .....

```
router1['hostname'] = 'r2'
```

**22.** Use the correct syntax to print the number of items in the list.

```
list1 = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
```

```
print(.....)
```

```
print(len(list1))
```

**23.** Loop through the items in the router\_list.

```
router_list = ['p1', 'p2', 'p3', 'pe1', 'pe2', 'pe3']
```

```
..... router in ..... :  
    print(router)
```

```
for router in router_list :  
    print(router)
```

**24.** What is the correct syntax to import a module named "requests"?

```
..... requests
```

```
import requests
```

## MODULE 3

25. Which two options are reasons that the use of APIs is growing? (Choose two.)

- APIs solve challenges presented by an unreliable network.
- **APIs allow for reuse of server code to service different clients like mobile, web, and so on.**
- **APIs enable developers to use cloud services.**
- There are very few use cases for integration with other applications.
- By using networked APIs, computations are performed faster.

26. What does the Postman code generator feature provide?

- It generates HTTP response codes based on your API request.
- **It generates programming code snippets of a request.**
- It generates server-side code snippets.
- It generates code for automated testing and monitoring of an API inside Postman.

27. Which statement about HTTP is true?

- HTTP is a transport layer protocol.
- HTTP lacks standardization.
- **HTTP is an application layer protocol.**
- HTTP is a stateful protocol.

28. Which two functionalities do programs like Postman offer? (Choose two.)

- **testing an API service**
- **composing HTTP requests**
- hosting a public API service
- intercepting and forging API requests
- analyzing TCP packets

29. Bottom of Form 28. Which Cisco management platform is primarily intended to use an SDN approach to manage data center resource?

- Cisco DNA
- **Cisco ACI**
- Cisco Prime Infrastructure
- Cisco NSO
- Cisco ACS

30. Which REST method is supported by the Cisco Webex Teams API?

- UPDATE

- PATCH
- **POST**
- OPTIONS

**31.** Which API can utilize the HTTP GET method?

- NX-API CLI
- **NX-API REST**
- NETCONF
- CLI
- SNMP



## MODULE 4

32. Which command binds the host port 80 with the applications (on the container) port 8080 when starting the container?

- -p (or -publish) 80:8080
- -p (or --publish) 8080:80
- **-p (or --publish) 80:8080**
- No additional command needs to be used, because Docker automatically binds those ports.

33. Which two options are essential CI/CD pipeline components? (Choose two.)

- latest software tools available
- **code repository**
- **build system**
- Python modules
- SDN controller
- reliable network connection

34. Which statement about bare-metal servers is correct?

- **It is very easy to replace physical servers.**
- Bare-metal servers have performance, security, and reliability advantages.
- It is not possible to provide resource isolation between containers on bare-metal servers using container technology.
- Resources are shared and cannot be optimized for a specific workload on a physical server.

35. Which of the following statements is most correct?

- Docker allows you to run images and build containers.
- **Docker allows you to run containers and build images.**
- Docker allows you to run and build containers.
- Docker allows you to run and build images.

36. Information on how to build a Docker image is written in a file named:

- **Dockerfile**
- Jenkinsfile
- docker-compose
- dockerimage

37. What happens if you attempt to perform a Docker build based on an image that has not been previously referenced on your machine?

- Docker will return a 408: image not found message.

- Docker will return a 404: file not found message.
- Docker will pull the image from GitHub.
- **Docker will pull the image from Docker Hub.**

**38.** The markup language used to write Docker playbook is:

- JSON
- **YAML**
- XML
- HTML

## MODULE 5

39. Which three statements are primary attributes of next-generation programmatic interfaces? (Choose three.)

- **They must support different types of transport: HTTP, SSH, and TLS.**
- They must be flexible and support different types of encoding formats, such as TCL and Python.
- They must support different types of transport: HTTPS, Telnet, and TCP.
- **There must be extensible and open APIs: REST, RESTCONF, NETCONF, and gRPC.**
- **They must be flexible and support different types of encoding formats, such as XML and JSON.**
- They must be proprietary and under strict license agreements.

40. Which two encoding types are supported by RESTCONF? (Choose two.)

- REST
- HTML
- **JSON**
- **XML**
- HTTP

41. Which two options about YANG statements are correct? (Choose two.)

- **Multiple leaf statements can exist within a list.**
- Multiple leaf statements can exist within a leaf-list.
- **A container can contain other containers.**
- A container cannot contain other containers.
- A container cannot be augmented.

42. Which two statements about Ansible are true? (Choose two.)

- Ansible is subscription-based.
- **Ansible is free and open source.**
- Ansible enables IaC.
- **Ansible is used for automation.**
- Ansible requires a dedicated server.
- Ansible requires a Red Hat subscription.

43. Which keyword is required in an Ansible playbook?

- `gather_facts`

- **hosts**
- services
- destinations
- machines
- peers

**44.** Which two protocols are considered modern APIs for managing Cisco IOS XE network devices? (Choose two.)

- Telnet
- SSH
- HTTP
- **NETCONF**
- **RESTCONF**

**45.** What does SDN stand for?

- scalable designed network
- switch-designated node
- **software-defined network**
- severity delineated nonaccess
- software-defined nodes