Congratulations! You passed!

Grade received: 15.12%
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Go to next item

1. Which of these are essential characteristics of the Cloud? (Select the two characteristics that apply. 1/1 point

- (-) Static access
- (-) Broad network access
- (+) **Correct**
  Correct
  One essential characteristic of the cloud is broad network access. Cloud computing services are accessed over the network through standard mechanisms and platforms.
- (-) Limited service
- (-) Resource pooling
- (+) **Correct**
  Correct
  One essential characteristic of the cloud is resource pooling. In what given cloud computing service model is the cloud, which they pass on to their customers, existing hardware? Infrastructure.

Expand

Correct
Great, you got all the right answers.

2. In the _____ cloud model, the cloud provider provisions the cloud infrastructure for exclusive use by a single organization. 1/1 point

- (-) Hybrid multicloud
- (-) Private
- (-) Hybrid
- (-) Public

Expand

Correct
Private cloud means that the cloud infrastructure is provisioned for exclusive use by a single organization. It could be on-premises or it could be owned, managed, and operated by a service provider.

3. Which of these is a key benefit of virtualization? (Select the two choices that apply. 1/1 point

- (-) Low maintenance costs
- (-) Quick and easy setup
- (+) **Correct**
  Correct
  Setting up a virtual machine is relatively easy and quick compared to provisioning an actual new environment for deployment in need to.
- (-) No need for a physical server
- (-) High computational power
- (+) **You should not be correct**
  Hints: In the virtualization and cloud technicians 3 passed video.

Expand

Incorrect
You didn't select all the correct answers.

4. Which of the following is true about containers? 1/1 point

- (-) Containers are heavier weight than virtual machines.
- (-) Containers are hypervisors in all cases.
- (-) Containers consume fewer resources than virtual machines.
- (-) Containers most include a guest OS in every instance.

Expand

Correct
Unlike virtual machines, containers do not need to include a guest operating system in every instance, reducing the resource requirements.

5. Which type of cloud storage can be mounted as multiple servers at once? 1/1 point

- (-) Object
- (-) Block
- (-) Stream
- (-) File

Expand

Correct
One advantage of file Storage is that it can be mounted or used on multiple servers at once.

6. _____ work on the parts of a website or app that the user interacts with, while _____ work on the logic that supports the functionality of the website or the application. 1/1 point

- (-) Full stack developers; Back-end developers
- (-) Front-end developers; Back-end developers
- (-) Front-end developers; Full stack developers
- (-) Back-end developers; Front-end developers

Expand

Correct
Front-end developers deal with everything that happens at the client side, everything that the user can see and interact with. Back-end developers deal with everything that happens on the server side, including the logic and functionality that makes the website or app work.

7. Which of the following best describes a route? 1/1 point

- (-) Code that works with data when processing requests from the front-end
- (-) Path to a website or page that the user interacts with
- (-) Web address or URL for a website
- (-) Method for creating style sheets faster and more easily

Expand

Correct
A route is a path to a website or page that the user interacts with. Routes generally take user input and show results based on the input.

8. Which HTML tag should you use to specify self-contained content? 1/1 point

- (-) <figure>
- (-) <section>
- (-) <canvas>
- (-)

Expand

Correct
The <figure> tag specifies self-contained content such as graphics, images, or code sections.

9. To JavaScript, what is one use of the following method? 1/1 point

Expand

Correct
Wrapper objects use special methods such as the valueOf and toString methods to convert between objects and primitive values.

10. Which of the following is a correctly formatted variable name or identifier in JavaScript? 1/1 point

- (-) LowerCustomer
- (-) lowCustomers
- (-) lowCustomers1
- (-) "lowCustomer"

Expand

Correct
Variable and identifiers must start with a letter, underscore, or dollar sign. Subsequent letters can also be numbers.

11. Which of the following is a popular web-hosted service for Git repositories? 1/1 point

Expand

Correct
Bitbucket is a popular web-hosted service for Git repositories in Bitbucket.

12. Which of the following is a feature of the Git Repository model? 1/1 point

- (-) Source code tracking
- (-) Two-tree system
- (-) Centralized version control
- (-) Gitflow workflow

Expand

Correct
The primary focus for Git is tracking source code during development.

13. If you need to change the code in a GitHub project you have write access to, you should first perform which of the following actions? 1/1 point

- (-) Issue a pull request
- (-) Create a new branch
- (-) Delete your working directory
- (-) Use the reset command

Expand

Correct
You should create a new branch when you need to change the code in a GitHub project.

14. What is the function of the git fetch command? 1/1 point

- (-) git fetch creates a pointer to a file in the remote repository to pull from local repositories.
- (-) g fetch transfers changes from the remote repository to remote tracking local branches.
- (-) g fetch performs a search in the current tree for a specified string in the project.
- (-) g fetch prepares and sends suggested alternatives to all project contributors.

Expand

Correct
Refer to the Cloning and Forking GitHub Projects video.

15. In a GH team project, which team member uses the gh clone command as part of their responsibilities? 1/1 point

- (-) Repository administrator
- (-) Integrator
- (-) Developer
- (-) Wiring manager

Expand

Correct
A repository administrator uses the gh clone command to allow anonymous download from a repository.

16. The cloud native application stack consists of four different layers: application runtime, application and data services, containing and orchestration, and cloud infrastructure. The _____ layer is responsible for backing services. 1/1 point

- (-) Scheduling and orchestration
- (-) Cloud infrastructure
- (-) Application and data services
- (-) Application runtime

Expand

Correct
Refer to the Cloud Native Applications video.

17. What is the first step in test-driven development? 1/1 point

- (-) Develop just enough code to make the test pass
- (-) Refactor the code to improve it
- (-) Add assertions to the code
- (-) Write a test case and run it in VS

Expand

Correct
Test-driven development follows the red-green-refactor pattern. The first step is to write a test case based on the functional requirements and run it in VS.

18. What does the modernization pattern "strangle the monolith" mean? 1/1 point

- (-) Leave the complex parts of the application as a set-piece the monolithic; rip application Programming Interfaces or APIs
- (-) Leave the monolith application as is and add new features and capabilities using microservices
- (-) Break down the monolith application into services or features at a time until the whole application is moved over.
- (-) Refactor the code in VS and add portions of the application.

Expand

Correct
Correct. Moving the large application piece by piece is referred to as "strangling the monolith."

19. Which of the following is a characteristic of cloud-native computing? 1/1 point

- (-) Monolithic applications
- (-) Stateful processes
- (-) Difficult scalability
- (-) Hybrid cloud

Expand

Correct
Cloud-native apps are developed for public, private, hybrid, and multi-cloud environments.

20. IBM Watson uses Natural Language Classifier (NLC) - what does NLC do? 1/1 point

- (-) Converts the human voice into written words
- (-) Applies linguistic analysis to extract key, free sentence, single-sentence, and conversational text
- (-) Uses deep learning algorithms to identify sentiment, objects, and faces
- (-) Identifies sentences or phrases into types and provides answers or next steps

Expand

Incorrect
Incorrect. Refer to the Using REST APIs with Watson AI Services video.

21. JSON is the standard format for data exchange with what? 1/1 point

- (-) Strongfly
- (-) API
- (-) Node.js
- (-) Lucid

Expand

Correct
Correct. JSON is the standard format used with REST APIs.

22. Pug.js is a JS library that uses what language? 1/1 point

- (-) JSON
- (-) JavaScript
- (-) Python
- (-) Groovy/Java

Expand

Correct
Correct. Pug.js is a special markup language called JavaScript XML (JSX) which resembles HTML.

23. When you import a Node.js module, what does the require function return? 1/1 point

- (-) A relative path to the script file
- (-) An object exports value
- (-) A JavaScript object that represents an instance of the module
- (-) Properties of the module

Expand

Incorrect
Incorrect. Refer to the Working with Node.js Modules video.

24. What is a promise? 1/1 point

- (-) An object representing an asynchronous method
- (-) A blocked resource
- (-) An asynchronous method
- (-) A valid block

Expand

Correct
Correct. Promises are most useful for operations that are time-consuming and can block resources.

25. What is template rendering? 1/1 point

- (-) It's the ability of the server to fill in dynamic content in the HTML template
- (-) It renders static HTML pages from the server
- (-) It binds built-in middleware to specific routes
- (-) It allows the middleware function into the Express.js app

Expand

Correct
Correct. It uses the view engine property, which is responsible for creating HTML from your views.

26. Some of the optimized Docker CLI commands include _____ to create a new image and _____ for listing dangling Docker images. 1/1 point

- (-) image build
- (-) docker pull
- (-) Docker run
- (-) Docker image

Expand

Correct
Correct. These are the correct commands for the listed operations.

27. Which of these is true of Kubernetes? 1/1 point

- (-) Provides continuous integration/continuous deployment pipelines to build applications or deploy source code
- (-) Provides a flexible model that maintains choice for open extension appropriate
- (-) Lends the option of applications from version 1
- (-) Provides logging, monitoring, and alerting solutions

Expand

Incorrect
Incorrect. Refer to the Container Orchestration video.

28. Which of the following is not true of a runtime image? 1/1 point

- (-) A container is a running image
- (-) It is the same as a container
- (-) It is built by using a Dockerfile
- (-) It is immutable

Expand

Correct
Correct. A container image represents a container like a blueprint or snapshot.

29. Which of the following statements is correct? 1/1 point

- (-) "Kube-system" is a user-created namespace for objects
- (-) When the apps command is run, the state of the cluster's Kubernetes cluster is made to match the state of the application's manifest.
- (-) The kubectl command-line utility is specific resources to group of resources.
- (-) The get command lists all the deployments that are present in the kube-system namespace.

Expand

Correct
Correct. This namespace is created by the Kubernetes system. It's not a user-created namespace.

30. What is Red Hat OpenShift? 1/1 point

- (-) A cloud component of Kubernetes
- (-) A plug-in for a web browser
- (-) A hybrid cloud, enterprise Kubernetes application platform
- (-) A Linux-based IDE that provides a rich environment for group of resources

Expand

Correct
Feedback: Correct. OpenShift builds on open-source Kubernetes to create an application platform.

31. What is the result of running the following lines of code? **1 / 1 point**

```
class Points(object):
    def __init__(self,x,y):
        self.x=x
        self.y=y
    def print_point(self):
        print('x=',self.x,' y=',self.y)
p1=Points(5,"A",'B')
p1.print_point()
```

- x=A
- y=B
- x=A y=B

Expand

Correct
Correct. The variables have been assigned and printed.

32. Web scraping is a process used for automatically extracting information from a website within minutes. What is the purpose of the Python code provided below in web scraping? **1 / 1 point**

"table_row=table.find_all(name='tr')"

- It will find all the data within the table marked with a tag 'tr.'
- It will find all the columns within the table marked with a tag 'all.'
- It will find all the data within the table marked with a tag 'all.'
- It will find all the rows within the table.

Expand

Correct
Feedback: Correct! find_all() is a method in the table object that will identify tags in a table with the parameter passed into it.

33. What value of a will produce the following output? Select the three statements that apply. **1 / 1 point**

Bye
Hillary

```
if(a=='B'):
  print('Hello')
else:
  print('Bye')
    print('Hillary')
```

- [x] a=B
  - Correct
    Correct: a=B does not match the if statement condition.
- [x] a="Bye"
  - Correct
    Correct: a="Bye" does not match the if statement condition.
- [x] a=Bye
  - Correct
    Correct: a=Bye does not match the if statement condition.
- [ ] a='B'

Expand

Correct
Great, you got all the right answers.

34. To append text to a file, which mode argument should be passed into the open() function? **1 / 1 point**

- 'r'
- 'w'
- 'a'
- 'r'

Expand

Correct
Correct! The correct format is open(path, 'a').

35. Which of the following statements is true about tuples and lists? **1 / 1 point**

- Tuples and lists are both ordered sequences.
- Tuples and lists are both mutable.
- Tuples and lists are both immutable.
- Tuples and lists are both unordered.

Expand

Correct
Correct! Tuples and lists are both ordered sequences but tuples are immutable whereas lists are mutable.

36. How does an entity-attribute model map to a relational database model? **0 / 1 point**

- Entities map to tables and attributes map to columns.
- Entities map to columns and attributes map to rows.
- Entities map to tables and attributes map to rows.
- Entities map to columns and attributes map to tables.

Expand

Incorrect
Incorrect. Refer to the Relational Data Concepts video.

37. Which statement about Django templates is true? **1 / 1 point**

- It contains Python code.
- It creates an XML document.
- It contains dynamic HTML elements.
- It may contain server-side JavaScript.

Expand

Correct
Correct! The Django template contains static HTML elements as well as special Python code describing how the dynamic content of HTML pages will be generated.

38. When you create a Django project, Django creates some core files, including manage.py. What purpose does manage.py serve? **1 / 1 point**

- It contains the URL and routing definitions of your Django app.
- It creates markdown elements.
- It provides a command line interface so you can interact with the Django project.
- It contains the settings and configurations for your Django project.

Expand

Correct
Correct! manage.py is a command line interface used to interact with the Django project to start the server, migrate models, and so on.

39. Which statement best describes Bootstrap? **1 / 1 point**

- It provides well-designed and commonly used HTML and CSS templates.
- It is a Django template.
- It is mainly used for serverless computing.
- It is a type of relational database.

Expand

Correct
Correct! It provides many well-designed and commonly used HTML and CSS templates to simplify Django template development.

40. Which statement best describes Cursor? **1 / 1 point**

- A special method in ORM to map a column in a database to a class primitive attribute.
- A method in OODP to retrieve an object's data.
- A special control data structure for iterating over rows in a database.
- Statements that must be assembled in application code and executed in the database system using database APIs.

Expand

Correct
Correct! The retrieved database rows are returned to application code as Cursor, a special control data structure for iterating over rows in a database.

41. In accordance with the twelve-factor app methodology, why should developers avoid storing configuration as constants in their code? **1 / 1 point**

- Because configuration environment variables are difficult to change across deploys without changing the code
- Because a twelve-factor app should not distinguish between local and third-party services
- Because configurations might differ among environments
- Because databases are likely the same in the various environments used for staging and production

Expand

Correct
Correct! Storing configurations as constants should be avoided since configurations might differ among environments."

42. FaaS is considered the originating technology in the serverless category. Which part of the serverless stack does FaaS represent? **1 / 1 point**

- Core compute and processing engine
- Data layer
- Communication layer (messaging)
- Storage

Expand

Correct
Correct! FaaS represents the core, serverless compute and processing engine and sits in the center of most serverless architectures.

43. OpenShift is most closely associated with which other technology? **1 / 1 point**

- Fedora
- FaaS
- Kubernetes
- Linux kernel

Expand

Correct
Correct! The concise definition of OpenShift, as provided on the Red Hat website, says that OpenShift is a hybrid cloud, enterprise Kubernetes application platform.

44. Which statement best describes blocking invocations? **1 / 1 point**

- The result is invoked prior to the action.
- They wait for a result prior to invocation.
- After the invocation they wait for the result.
- They invoke the action immediately but do not wait for the result.

Expand

Correct
Correct! Blocking invocations invoke the action and wait for the result.

45. Which statement is true about object storage? **1 / 1 point**

- It makes use of relational databases for storage.
- Data stored in object storage is hierarchical.
- It is used when fast, efficient, and reliable data transportation is required.
- Objects are self-contained repositories.

Expand

Correct
Correct! An object is a self-contained repository that contains the data, metadata, and a unique identifier that applications use to access the object.