Congratulations! You passed!

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Go to next item

5. In the _____ model, services are centrally hosted and licensed on a subscription basis.

1/1 point

- Platform as a Service
- Computing as a Service
- Software as a Service
- Infrastructure as a Service

Expand

Correct
In the Software as a Service model, software and applications are centrally hosted and licensed on a subscription basis.

6. In the _____ cloud model, the cloud provider provisions the cloud infrastructure for exclusive use by a single organization.

1/1 point

- Public
- Hybrid multicloud
- Hybrid
- Private

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 third-party.

7. Which of the following is a benefit of using virtual machines? Select the two statements that apply.

1/1 point

- Virtual machines are possible between different physical servers.
  - Expand
  - **Correct**
  - Virtual machines allow virtual machines from one hypervisor to another hypervisor on a different physical server simultaneously.
- Virtual machines do not need guest OSs.
- Virtual machines uses the host ot deploy one guest OS.
- Virtual machines can run different operating systems under the same host.
  - Expand
  - **Correct**
  - Because virtual machines are independent, you can run different operating systems on different virtual machines.

Expand

Correct
Great, you got all the right answers.

8. Which of the following is true about containers?

1/1 point

- Containers use hypervisor weight than virtual machines.
- Containers consume more resources than virtual machines.
- Containers use hypervisors in all cases.
- Containers must 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.

9. Which type of cloud storage is ideal for storing unstructured data?

1/1 point

- File
- Object
- Block
- Block

Expand

Incorrect
Refer to the Object Storage Overview video.

10. _____ exists on the perimeter of a website or app that lets your visitors safely, while _____ work on the logic that supports the functionality of the website or the application.

1/1 point

- Front-end developers, Full-stack developers
- Back-end developers, Front-end developers
- Full-stack developers, Back-end developers
- Front-end developers, Back-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.

11. HTML uses _____ to talk to servers and backend services to process user events and display results on a website.

1/1 point

- JavaScript functions
- APIs
- Forms
- CSS

Expand

Correct
HTML uses APIs to talk to servers and backend services to process user events and display results on a website.

12. Which HTML tag should you use to specify self-contained content?

1/1 point

- <section>
- <container>
- <figure>
-

Expand

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

13. In JavaScript, what is a key-value pair of the following method?

1/1 point

- Add whitespace to hide video of a string.
- Convert between objects and primitive literals.
- Join two or more strings together.
- Extract part of a string and return the part in a new string.

Expand

Correct
Primitive objects may special methods such as the valueof and toString methods to convert between objects and primitive literals.

14. Which of the following is a correctly formatted variable name or identifier in JavaScript?

1/1 point

- newCustomerID
- "newCustomer"
- newCustomer
- newCustomerID

Expand

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

15. Which of the following is a popular web hosted service for Git repositories?

1/1 point

- Alice
- Audi
- GitLab
- NetFlix

Expand

Correct
Most popular web hosted services for Git repositories is GitLab.

16. What is one purpose for using repositories?

1/1 point

- Listing a web interface to create a project
- Staging changes before committing them to a project
- Maintaining version control for a project
- Providing local working directories for a project

Expand

Correct
A repository can track and maintain version control.

17. 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

- Use the reset command
- Fork a pull request
- Delete your working directory
- Create a new branch

Expand

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

18. What is the function of the git push command?

1/1 point

- git push stores commits ready to be local repository
- git push moves or renames a file from the local repository
- git push applies a patch to files in the remote repository
- git push transfers your local changes to the remote repository

Expand

Correct
The git push command transfers changes from your local repository to the remote repository.

19. In a CI/CD workflow, which team member uses the git rm command as part of their responsibilities?

1/1 point

- Developer
- Repository administrator
- Integrator
- Wiring manager

Expand

Correct
As a Integrator uses the git rm command to apply patches emailed to them project contributors.

20. The cloud native application stack consists of four different layers: application runtime, application and data services, container runtime and management, and cloud infrastructure. The _____ layer is where service-private operations.

1/1 point

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

Expand

Correct
The scheduling and orchestration layer is where control planes operate, such as Kubernetes, Istio, and Knative.

21. What is the first step in test-driven development?

1/1 point

- Develop just enough code to make the test pass
- Write a test case and watch it fail
- Add assertions to the code
- Refactor the code to improve it

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 watch it fail.

22. What does the modernization pattern "strangle the monolith" mean?

1/1 point

- Leave the monolith application as is and add new features and capabilities using microservices
- Leave the complete parts of the application as is and create the functionality recapitulates integrating the monolith
- Rewrite the monolith in the end-state practices of the application
- Break down the monolith application into services or leave as a whole and the whole application is moved over.

Expand

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

23. Which of the following is a characteristic of cloud native computing?

1/1 point

- Stateful processes
- Monolithic applications
- Easy scalability
- High maintenance

Expand

Correct
A cloud native application consists of microservices working together as a whole to comprise an application, making the application easy to scale.

24. Web Browser APIs are exposed as _____.

1/1 point

- cross-origin data
- REST APIs
- Images
- A natural language classifier

Expand

Correct
Correct. You can interact with each API by using some of the HTTP methods, such as GET and POST.

25. JSON is the standard format for data exchange with what?

1/1 point

- Google
- Google
- Google
- GET

Expand

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

26. React is an open source library created and maintained by Facebook and community developers. What is it having used to build?

1/1 point

- UI Questions
- Accessibility messages
- Complex site
- Error messages

Expand

Correct
Correct. React is a framework for building client-side dynamic web applications.

27. You can use the _____ function to import a Node.js module.

1/1 point

- require
- Package
- Mod_utility
- Require

Expand

Correct
Correct. The require function is used to import a Node.js module.

28. The initial state of a promise object is _____.

1/1 point

- Rejected
- Resolved
- Blocked
- Pending

Expand

Correct
Correct. A promise object is in a pending state when it is created.

29. What purpose does a router serve?

1/1 point

- Access the server or handling queries
- Determines the state in which a pathnameis a manner
- Determines what to show after a function is executed
- Handles errors

Expand

Correct
Correct. A router is used for branching query handling and routing each query differently.

30. Some of the common Docker CLI commands include _____ for creating container images and _____ for running images stored in a remote location.

1/1 point

- images, push
- build, pull
- run, add
- images, pull

Expand

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

31. It is the most popular container orchestration platform. It is portable, extensible, open source, manages containerized workloads and services, but it can contain. What are we referring to here?

1/1 point

- Kubernetes
- OpenShift

Expand

Correct
Correct. This is how the Kubernetes documentation describes Kubernetes.

32. What is a container image?

1/1 point

- A set file containing continuals that will run the apps in a container.
- A runtime file that creates the secure code, libraries, and dependencies that are needed to run an application.
- A process that runs a container but with its own file system and networking.
- A' child, file with instructions upon specifying the attributes of a container.

Expand

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

33. Which of the following statements is incorrect?

1/1 point

- "Kube-system" is a user-created namespace for objects.
- When the apiserver receives a call, the value of the request's Kubernetes cluster to route to the appropriate Kubernetes API server for processing.
- You can connect first all the deployments that are present in the kube-system namespace.
- They describe command-linear details about a specific resource or group of resources.

Expand

Correct
Correct. The namespace is created by the Kubernetes system, it's not a user-created namespace.

34. Which of the following is provided by OpenShift's cluster services?

1/1 point

- Private registry
- Networking solutions
- HA Proxy
- Integrated monitoring

Expand

Correct
Correct. Red Hat OpenShift provides a wide array of services to be used with Kubernetes.

35. What is the result of running the following lines of code?

1/1 point

```
class Registration(db.Model):
    id = db.Column('id', db.Integer, primary_key=True)
    first = db.Column('first', db.Unicode)
    last = db.Column('last', db.Unicode)
    def __init__(self, first=u'', last=u''):
        self.first = first
        self.last = last
db.create_all()
jim = Registration('Jim', 'Jones')
db.session.add(jim)
```

- 0
- 1
- 0 or 1
- 2

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='kr')"

- (selected) it will find all the data within the table marked with a tag 'kr."
- it will find all the columns within the table marked with a tag "all."
- it will find all the rows within the table.
- it will find all the data within the table marked with a tag "all."

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 x will produce the following output? **1 / 1 point**

Hello
Christina

```
x="A"
if(x=="A"):
  print('Hello')
else:
  print('Bye')
print('Christina')
```

- x=1
- x=A
- (selected) x="A"

Expand

Correct
Correct! x= "A" is the parameter that matches up with the conditional.

34. When using the open() function, what is the purpose of passing the parameter 'a+' into it? **1 / 1 point**

- Reading and writing. Cannot truncate the file.
- (selected) Appending and reading. Creates a new file if none exists.
- Opening and reading. Creates a new file if none exists.
- Writing and reading. Truncates the file.

Expand

Correct
Correct. Rather than passing 'a' only, 'a+' both appends and reads.

35. Which is the correct syntax for declaring the tuple, myTuple? **1 / 1 point**

- (selected) myTuple = ("rectangle", "circle", "square", "hexagon")
- myTuple={"rectangle", "circle", "square", "hexagon"}
- myTuple = ("rectangle", "circle", "square", "hexagon")
- myTuple = ([rectangle], [circle], [square], [hexagon])

Expand

Correct
Correct! Tuples are expressed as comma separated elements within parentheses.

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

- (selected) 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.
- Entities map to tables and attributes map to columns.

Expand

Incorrect
Incorrect. Refer to the Relational Data Concepts video.

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

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

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 settings and configurations for your Django project.
- It creates markdown elements.
- It contains the URL and routing definitions of your Django app.
- (selected) It provides a command line interface so you can interact with the 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 of the following describes one of the two types of containers in Bootstrap? **0 / 1 point**

- (selected) It creates a card-grid.
- It has variable width.
- It displays tabular data.
- It spans the entire width of the parent element.

Expand

Incorrect
Incorrect. Refer to the Bootstrap Integration video.

40. Which statement is true regarding OOP and CRUD? **1 / 1 point**

- OOP performs CRUD on data using statements like "insert," "delete," and "update."
- (selected) OOP performs CRUD on data using methods.
- OOP performs CRUD on data using class patterns like inheritance, association, and aggregation.
- OOP performs CRUD on data using data manipulation language

Expand

Correct
Correct! Data is stored in OOP using objects so accessing an object's data requires the use of methods.

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

- Because databases are likely the same in the various environments used for staging and production
- 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
- (selected) Because configurations might differ among environments

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**

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

- Linux kernel
- (selected) Kubernetes
- FaaS
- Fedora

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 the retrieve activation command? **0 / 1 point**

- It fetches the action-it's
- It fetches only the result of the action.
- (selected) It fetches the last activation record.
- It fetches the entire activation record.

Expand

Incorrect
Incorrect. Refer to the Create and Invoke Actions part 1 video.

45. Which technology is generally considered an example of serverless computing? **1 / 1 point**

- PaaS
- (selected) FaaS
- IaaS
- SaaS

Expand

Correct
Correct! FaaS is an excellent example of serverless computing.