Congratulations! You passed!

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

- Pay as you go
- Correct
  Correct
  Essential characteristics of the cloud is measured service. Measured service means that you only pay for what you use or reserve for you.
- On-demand computing resources
- Correct
  Correct
  Essential characteristics of the cloud is on-demand self-service. On-demand self-service means that you get access to cloud resources such as the processing power, storage, and network just when needed, without requiring human interaction with each service provider.
- Single tenant
- Fixed fee

Report

Correct
Correct
Great, you got all the right answers.

6. In the _____ cloud model, an organization's on-premises private cloud and third party public cloud connect through a single, flexible infrastructure for running the organization's applications and workloads. 1/1 point

- Public
- Private
- NIST
- Hybrid

Report

Correct
Correct
Hybrid Cloud is a computing environment that connects an organization's on-premises private cloud and third-party public cloud through flexible infrastructure for running the organization's applications and workloads.

7. Virtualization is the process of creating a software-based version of physical resources, made possible through the use of _____. 1/1 point

- Load balancers
- VPNs
- Hypervisors
- Third-party plugins

Report

Correct
Correct
A hypervisor makes virtualization feasible. The hypervisor is a piece of software that runs above the physical server, and the hypervisor pulls the resources from the physical server and allocates them to your virtual environments.

8. A _____ is an executable unit of software in which application code is packaged, along with its libraries and dependencies, in common ways so that it can be run anywhere—desktop, traditional IT, or the cloud. 1/1 point

- Hypervisor
- Host
- Instance
- Container

Report

Correct
Correct
A container is an executable unit of software in which application code is packaged, along with its libraries and dependencies, in common ways so that it can be run anywhere—desktop, traditional IT, or the cloud.

9. Which type of cloud storage is presented to compute nodes using high speed fiber connections? 1/1 point

- File
- Block
- Object
- Blob

Report

Correct
Correct
Block storage is presented to compute nodes using high speed fiber connections, which means that read and write speeds are typically much faster and reliable than with file storage.

10. Front-end developers use HTML to do which of the following to a website? 1/1 point

- Perform data analysis on the website
- Add interacting to the website
- Manage styles on the website
- Create the physical structure of the website

Report

Correct
Correct
Front-end developers use HTML to create the website's physical structure, including elements such as text, links, images/videos, page dividers, and buttons.

11. Which of the following Data describes an API? 1/1 point

- Language used to add some interacting and dynamic content to web pages
- Code that works with data when processing requests from the front end
- Path to a website or page that has user interaction
- JavaScript library that builds and renders components for a web page

Report

Correct
Correct
An API is a code that works with data when processing incoming requests from the front end.

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

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

Report

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

13. In JavaScript, what is the use of the typeof operator? 1/1 point

- Insert the type in front the variable
- Sort the type of elements in an array
- Convert the type of object to a different type
- Determine the data type of the supplied operand

Report

Correct
Correct
The typeof operator is used to determine the data type of the supplied operand.

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

- test(customer)
- "test(customer)"
- test{customer}
- test[customer]

Report

Correct
Correct
JavaScript 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

- SCM Anywhere
- Mercurial
- Visual Sourcesafe
- Concurrent Versions System

Report

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

16. What is one purpose for using repositories? 1/1 point

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

Report

Correct
Correct
A repository can track and maintain version control.

17. Assume you are a developer on a GitHub project, and on your computer, you have a cloned copy of the GitHub repository. After editing several files in your local repository, what is the first step you must take to push your changes back to GitHub? 1/1 point

- Use the add command
- Update the README file
- Create a new master branch
- Delete your working directory

Report

Correct
Correct
When ready to push your changes back to GitHub, you must first run the git add command on the changed files. This command tells the Git to stage a file.

18. What is the function of the git push command? 1/1 point

- git push applies a patch to files in a Git remote repository
- git push transfers your local changes to the remote repository
- git push creates a remote in the Git local repository
- git push checks whether files match in the Git repository

Report

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

19. In a CI/CD team project, which team member uses the git etc command as part of their responsibilities? 1/1 point

- Developer
- Repository administrator
- Integrator
- Bitbucket manager

Report

Correct
Correct
An integrator uses the git etc 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, scheduling and orchestration, and cloud infrastructure. The _____ layer defines the underlying environment. 1/1 point

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

Report

Correct
Correct
Cloud infrastructure layer defines the underlying environment. Cloud native apps are developed for public, private, hybrid, and multi-cloud environments.

21. Which continuous delivery feature can you use to automate builds, unit tests, and deployment? 1/1 point

- Online pipeline
- Git repository
- Issue tracker
- Issue tracker

Report

Correct
Correct
A delivery pipeline is a feature of continuous delivery you can use to automate builds, unit tests, and deployment.

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
- Break down the monolith application into service or freeze as a binary and the whole application is moved over
- Refactor the code a bit and add pieces of the application
- Gradually replace the monolithic application one piece at a time the functionality via duplicate implementing functionality in a different

Report

Correct
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 legacy computing? 1/1 point

- Stateful applications
- Easy scalability
- Continuous integration
- Hybrid cloud

Report

Correct
Correct
Legacy computing involves monolithic applications, which rely on load balancing and stateful applications to operate over workloads across multiple servers.

24. What is JSON Binary? 1/1 point

- A public portal that contains documentation for different REST APIs
- The artificial intelligence offering from Ibm
- An architecture style for building resources on the Web
- An application for interacting with HTTP APIs that presents a friendly graphical user interface (GUI) for constructing requests and viewing responses

Report

Correct
Correct. Webser-core natural language processing (NLP), computer vision, and machine learning technologies have proved significant for the automation of unstructured data.

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

- .csv or
- Strings
- .xml
- Tests.js

Report

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

26. React is a UI library that uses what language? 1/1 point

- Python
- Erlang/otp
- JSON
- Javascript

Report

Correct
Correct. React uses a special markup language called JavaScript XML (JSX) which resembles HTML.

27. You can use the _____ function to import a Node.js module. 1/1 point

- require
- Package
- Require
- Mod_folder

Report

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
- Pending
- Resolve

Report

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

29. What purpose does a cookie serve? 1/1 point

- Assists the server in handling queries
- Handles errors
- Determines when a block after a function is executed
- Determines the order in which middleware is chained

Report

Correct
Correct. A cookie is used for maintaining query handling and routing each query differently.

30. Some of the common Docker CLI commands include _____ to create a new image and _____ for starting deployed images. 1/1 point

- ls, build
- push, pull
- image, build
- build, run

Report

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

31. Kubernetes is the most popular container orchestration platform. It is portable, extensible, open source, manages containerized workloads and services, but it is not a platform. What are you referring to here? 1/1 point

- Kubernetes
- OpenShift

Report

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

32. Which of the following is not true of a container image? 1/1 point

- A container is a running image
- It is stateful
- It is file same as a container
- It is built by using a Dockerfile

Report

Correct
Correct. A container image represents a container file (unlayered or unpacked).

33. Which of the following is not true of the apply command? 1/1 point

- It adds a new cluster deployment needs to be created
- It replaces a file in directory of files
- It is declarative
- It is namespace scoped

Report

Correct
Correct. The get and describe commands are namespace scoped.

34. What is Red Hat OpenSHIFT 1/1 point

- A crucial component of Kubernetes
- A digital cloud, enterprise Kubernetes application platform
- A security focused utility that provides a free services
- A proprietary, not a product

Report

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

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

```
for i in range(1, 10):
    if i % 2 == 0:
        print(f"{i} is even")
    elif i % 3 == 0:
        print(f"{i} is divisible by 3")
    else:
        print(f"{i} is odd")
else:
    print("Done")
```

- 1 is odd
  2 is even
  3 is divisible by 3
  4 is even
  5 is odd
  6 is even
  7 is odd
  8 is even
  9 is divisible by 3
  Done

Expand

Correct
Correct. The variables have been assigned and printed.

32. What does the following code do to an HTML string that is saved in a variable named "html" and uses the Python library "BeautifulSoup"? **1 / 1 point**

```
soup = BeautifulSoup(html, "html.parser")
print(soup.prettify())
```

- It prints out the html.parser object.
- It assigns the name "html" to the soup instance.
- It assigns the name "html.parser" to the soup instance.
- It prints out the BeautifulSoup object as a nested data structure.

Expand

Correct
Correct! soup is an instance of BeautifulSoup and the method prettify() creates a nested structure from the html string.

33. In the following code, if x=4, what is the output? **1 / 1 point**

```
if(x > 3):
  print('Hello')
else:
  print('Bye')
print('Hillary')
```

- Hello
- Bye Hillary
- Hello Hillary
- Bye

Expand

Correct
Feedback: Correct!. x=4 matches the if statement condition.

34. When using the open() function to write to a file what are the two parameters that should be passed into it? **1 / 1 point**

- The text to be written to the file and the mode argument w.
- The URL to the file and the mode argument w.
- The path to the file and the mode argument w.
- The name of the file and the mode argument w.

Expand

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

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

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

Expand

Incorrect
Incorrect. Refer to the Relational Data Concepts video.

37. What else does the Django template contain besides Python code? **1 / 1 point**

- Static HTML elements
- XML elements
- Markdown elements
- Dynamic HTML elements

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. Which statement best describes a Django project? **0 / 1 point**

- It contains the URL and routing definitions of your Django app.
- It is an implementation of the standard Model-View-Controller (MVC) pattern.
- It is a Python package that contains all the settings for an instance of a Django app.
- It takes a web request such as HTTP GET, POST, DELETE, or UPDATE and returns a web response.

Expand

Incorrect
Incorrect. Refer to the Create a Django App video.

39. Which of the following describes one of the two types of containers in Bootstrap? **0 / 1 point**

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

Expand

Incorrect
Incorrect. Refer to the Bootstrap Integration video.

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 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.
- A method in OOP to retrieve an object's data.

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. What is the purpose of the twelve-factor app methodology? **0 / 1 point**

- To group the code, deploy, and operate phases of the software delivery lifecycle
- To ensure that applications are ready for cloud-native deployment
- To make sure the app is contained in a single codebase
- To compile the code, gather dependence information, and transform the codebase into an executable unit called a build

Expand

Incorrect
Incorrect. Refer to the Twelve-Factor App video.

42. Which compute model has the shortest provisioning time? **0 / 1 point**

- Containers
- Platform as a Service
- Virtual machines
- Function-as-a-service

Expand

Incorrect
Incorrect. PaaS takes a longer time to provision compared to other compute models.

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

- Linux kernel
- FaaS
- Kubernetes
- 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 ID.
- It fetches only the result of the action.
- 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 statement about the serverless stack is true? **0 / 1 point**

- Storage capacity is limited.
- Serverless stack usually makes use of object storage.
- Serverless implies that servers are not used for data storage.
- The serverless environment often provisions a specific database, or multiple instances of that database, on servers in a data center.

Expand

Incorrect
Incorrect. Refer to the Serverless Stack video.