CU   Cloud United

CU™ Cloud Test Practitioner (CTP)

Sample exam — 10 Questions

Released Version

2022 Syllabus

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Purpose of this document

This document contains 10 sample exam questions for CU Cloud Test Practitioner (CTP) in the English language.

The sample questions, answer sets and associated justifications in this document have been created by a team of subject matter experts and experienced question writers with the aim of assisting people who are planning to take the CU Cloud Test Practitioner (CTP) examination.

None of these questions are used in the official CU Cloud Test Practitioner (CTP) examination, but they are written to the same level of difficulty as the official certification exam and considered to be a sampling, as there are 40 questions in the real exam.

Instructions

The question-and-answer sets are organized in the following way:

- Chapters
- Question - including any scenario followed by the question stem
- Answer Set with explanations

General Information on the sample exam paper:

- Number of Questions: 10
- Number of points: 10 (1 per question)
- Please only choose one answer per question

List of Chapters

- Chapter 1 - Introduction to Cloud
- Chapter 2 - Cloud Technology and Terminology
- Chapter 3 - Cloud Testing
- Chapter 4 - Cloud Migration
- Chapter 5 - Advanced Cloud Topics

Question 1
(correct answer is worth 1 point)

Which of the following statements (I - V) about virtual machines (VMs) and containers are **TRUE**?

  I.   VMs make use of the type 2 hypervisor.
  II.   VMs consume a lot of memory because they run on a complete operating system.
  III. VMs require orchestration and containers do not.
  IV.   Containers share the host kernel making them lightweight in general.
  V.   Containers cannot be scaled but VMs can.

☐ (a) Options I and III

☐ (b) Options I and V

☐ (c) Options II and IV

☐ (d) Options II and V

Question 2
(correct answer is worth 1 point)

Which of the following statements (I - V) about Kubernetes are **TRUE**?

  I.   A node is responsible for starting the containerized application.
  II.   A Kubernetes cluster consists of three types of resources – the master, nodes and the coordinator between the master and the nodes.
  III. A node that serves as a worker machine is a physical machine and not a virtual machine.
  IV.   A Kubernetes cluster can be deployed on a virtual machine.
  V.   Kubernetes makes it possible to decouple the containerized app from an individual machine.

☐ (a) Options I, III, and IV

☐ (b) Options I, II, and V

☐ (c) Options II, III, and IV

☐ (d) Options II, IV, and V

Question 3

(correct answer is worth 1 point)

"InfyCompute" has a cloud solution where they host various type of testing tools, which also includes performance testing tools. They guarantee the ability to support loads for up to a million concurrent users and ensure rapid scalability on their hyperscaler. They have a dedicated on-prem data center to generate load for load testing their own solution.

Considering the following points:

- I.   Testing the cloud
- II. Testing using the cloud
- III. Testing an application on the cloud
- IV. Testing across the cloud

Which **TWO** of the above points (I – IV) is InfyCompute performing?

☐   (a)   Options I and III

☐   (b)   Options I and IV

☐   (c)   Options II and III

☐   (d)   Options III and IV

Question 4

(correct answer is worth 1 point)

A software to convert images to cartoons is offered as a SaaS. This software is hosted on a cloud infrastructure provided by "Aamazing WebnCloud Services". As one client is trying to automate their image to cartoon conversion, they accidentally launch a large number of conversions in parallel. This unintended action causes the Amazing WebnCloud Services server to overload and crash.

Which **ONE** of the following issues is **MOST** exemplified in this above scenario?

☐   (a)   Compliance issue

☐   (b)   Reliability issue

☐   (c)   Disaster recovery issues

☐   (d)   Inadequate response time issue

Question 5

(correct answer is worth 1 point)

Migrating to the cloud has its own set of challenges and risks, such as data integrity, security, privacy, and business acceptability. These risks can be mitigated through the adoption of additional procedures.

"JustPDFIt" is an online PDF converting software that enjoys wide popularity. The developers of the software have decided to move their software from an on-prem server to a cloud-based server without any changes to the software itself. Unfortunately, after the migration, the JustPDFIt developers have begun to encounter a number of issues.

Which **ONE** of the following issues is **NOT** related to the migration?

☐ (a)   A lack of functionality

☐ (b)   The performance of the application has degraded

☐ (c)   Some of the user data is missing

☐ (d)   The security of the application has been compromised

Question 6

(correct answer is worth 1 point)

"AISTAR" produces a tool with their name. The AISTAR tool is hosted on the cloud and provides access to anyone who wants to use it to test AI models, in a SaaS mode. Their testing team has identified a number of test types to be conducted. The application is hosted on a public cloud.

Considering the following types of tests:
  I.   User interface testing
 II.   Migration testing
III.   Compatibility testing
 IV.   Scalability testing
  V.   Multitenancy testing

Which **TWO** of the above types of testing (I – V) are **MOST** relevant for testing AISTAR (from a cloud perspective)?

☐ (a)   Options I and IV

☐ (b)   Options I and III

☐ (c)   Options II and V

☐ (d)   Options IV and V

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Question 7
(correct answer is worth 1 point)

A specific set of tests are being run for a migration exercise. These tests are related to checking the format of the data type.

Which **ONE** of the following data migration tests is **MOST LIKELY** being performed?

- ☐ (a) CRUD testing
- ☐ (b) Semantics testing
- ☐ (c) Syntax testing
- ☐ (d) Data privacy testing

Question 8
(correct answer is worth 1 point)

A cloud migration specialist has recommended the use of an architectural pattern where the application makes use of containers for packaging one specific small feature per container and then using a tool to orchestrate their behavior.

Which **ONE** of the following options is exemplified in this above scenario?

- ☐ (a) Serverless computing
- ☐ (b) Microservices-based architecture
- ☐ (c) VM based computing
- ☐ (d) High-performance on-prem computing

Question 9
(correct answer is worth 1 point)

Which **ONE** of the following types of tests is **MOST** relevant for testing the behavior of the containerized application?

- ☐ (a) GUI
- ☐ (b) Performance
- ☐ (c) Availability
- ☐ (d) Load balancing

Question 10

(correct answer is worth 2 points)

Jennifer is an engineer responsible for the deployment of a product that uses an approach where she writes commands that get executed and result in deployment.

Which **ONE** of the following options is the IaC approach that Jennifer is performing in the above scenario?

☐   (a)   Imperative

☐   (b)   Declarative

☐   (c)   Continuous deployment

☐   (d)   Continuous integration

Answer Key:

Question 1

a) Incorrect: *VMs make use of type 1 as well type 2 hypervisors. Containers require orchestration.*
b) Incorrect: *VMs make use of type 1 as well type 2 hypervisors. Containers can be scaled*
c) Correct: *VMs do consume a lot of memory for the reason mentioned and containers share the host kernel making them lightweight.*
d) Incorrect: *Option II is correct but option V is not because containers can be scaled.*

Question 2

a) Incorrect: *I – The master is responsible for starting the containerized application. III – Node can be a physical or a virtual machine. IV – Is correct*
b) Incorrect: *I – The master is responsible for starting the containerized application. II – is correct. V – is correct.*
c) Incorrect: *II – is correct. III – is incorrect and IV is correct.*
d) Correct: *All the options are correct.*

Question 3

a) Correct: *I – They are a hyperscaler and are testing for scalability. This is testing the cloud. III – They are testing the application namely, the load testing tool, for supporting millions of users. This is testing an application on the cloud.*
b) Incorrect: *I – Is correct. IV – Incorrect as they are using on-prem data center to generate the load and not testing a combination of cloud and on-prem or different clouds etc.*
c) Incorrect: *II – Incorrect. On-prem is being used to generate load so it is not a case of testing using the cloud. III – Is correct.*
d) Incorrect: *III is correct but IV is incorrect.*

Question 4

a) Incorrect: *There is no compliance issue here.*
b) Correct: *A crash is a reliability issue.*
c) Incorrect: *There is no disaster recovery issue here.*
d) Incorrect: *There is no response time issue here.*

Question 5

a) Correct: *No functionality has been changed, added, or deleted. Hence this is NOT related to migration.*
b) Incorrect: *Performance of the software can go down post-migration. Hence this IS related to migration.*
c) Incorrect: *Performance of the software can go down post-migration. Hence this IS related to migration.*
d) Incorrect: *Security of the software can be compromised post-migration. Hence this IS related to migration.*

Question 6

a) Incorrect: *I – Incorrect. This type of testing is not specific to the cloud. IV – is correct. Scalability needs to be tested for the cloud.*
b) Incorrect: *Incorrect. III – is incorrect. While compatibility testing can be performed for cloud applications but being a SaaS application, it is not very relevant.*
c) Incorrect: *Incorrect. There is no migration involved. V – is correct. Being a SaaS application multitenancy is a concern.*
d) Correct: *IV and V both are correct.*

Question 7

a) Incorrect: *CRUD testing is not related to the format of the data.*
b) Incorrect: *Semantic testing is related to the meaning of the data.*
c) Correct: *Syntax testing is related to the format of the data.*
d) Incorrect: *Data privacy testing is not related to the format of the data.*

Question 8

a) Incorrect: *CRUD testing is not related to the format of the data.*
b) Correct: *This is most likely an example of microservices esp because the question says that there is a small feature per container.*
c) Incorrect: *While this is correct in the broad sense but this is not an architectural pattern we are looking*
d) Incorrect: *This is clearly incorrect as the solution is for the cloud and not on-prem.*

Question 9

a) Incorrect: *This type of test is relevant from the app perspective but not from the backend functionality (containers) perspective.*
b) Correct: *This type of test is relevant for testing containers as performance of the application will be impacted.*
c) Incorrect: *This type of test is relevant from the cloud perspective but not from the perspective of the container.*
d) Incorrect: *This type of test is relevant from the app perspective but not from the containers perspective.*

Question 10

a) Correct: *This is correct as per the definition.*
b) Incorrect: *This is incorrect as per the definition in answer A.*
c) Incorrect: *Continuous deployment is not the same as IaC.*
d) Incorrect: *Continuous integration is not the same as IaC.*