

[Dashboard](#) / [My courses](#) / [S1-23\\_SEZG583](#) / General / [Quiz 1](#)

**Started on** Saturday, 9 September 2023, 4:27 PM

**State** Finished

**Completed on** Saturday, 9 September 2023, 4:36 PM

**Time taken** 8 mins 52 secs

**Grade** 4.75 out of 5.00 (95%)

Question **1**

Correct

Mark 0.25 out of 0.25

For Facebook at a point in time, a user in India likes a post which increases the “Like” count of the post from say 200 to 201. At the same point in time, a user in Canada, in a different geographical zone, clicks on the post, and he/she sees the “Like” count as 200, not 201. This example belongs to

- ☐ a. strong consistency
- ☒ b. eventual consistency ✓
- ☐ c. None of the options

Your answer is correct.

The correct answer is:  
eventual consistency

Question **2**

Correct

Mark 0.25 out of 0.25

Single-receiver message-based communication is especially well suited for sending asynchronous commands from one microservice to another

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question **3**

Correct

Mark 0.25 out of 0.25

There are no challenges in implementing Scalability

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Question **4**

Correct

Mark 0.25 out of 0.25

What are some of the key resources that you can implement to make highly available applications.

- ☐ a. Backup system
- ☐ b. Use multiple application servers
- ☐ c. Spread out physically
- ☒ d. All of the options ✓

Your answer is correct.

The correct answer is:  
All of the options

Question **5**

Correct

Mark 0.25 out of 0.25

The main characteristics of microservices are

- a) Small, and Focused on Doing One Thing Well
- b) Autonomous
- c) Loosely coupled
- d) Dependent on each other

- ☐ a. a,c, and d only
- ☒ b. a,b,and c only ✓
- ☐ c. b, c, and d only
- ☐ d. a, b, and d only

Your answer is correct.

The correct answer is:

a,b,and c only

Question **6**

Correct

Mark 0.25 out of 0.25

The goal is to have \_\_\_\_\_ between multiple data sources across your distributed system.

- ☐ a. Strict consistency
- ☐ b. strong consistency
- ☒ c. eventual consistency ✓
- ☐ d. No consistency

Your answer is correct.

The correct answer is:

eventual consistency

## Question 7

Correct

Mark 0.25 out of 0.25

Which of the following are the advantages of Microservices

- a) Technology Heterogeneity
- b) Ease of Deployment
- c) Easy to move from Monolith to Microservices
- d) Scaling

- ☐ a. a, b, and c only
- ☒ b. a, b, and d only ✓
- ☐ c. a, b, and d only
- ☐ d. b, c, and d only

Your answer is correct.

The correct answers are:

a, b, and d only,

a, b, and d only

## Question 8

Correct

Mark 0.25 out of 0.25

Select all the functions of Load Balancer

- ☐ a. Processes the incoming requests
- ☒ b. Distributes client requests or network load efficiently across multiple servers ✓
- ☒ c. Ensures high availability and reliability by sending requests only to servers that are online ✓
- ☒ d. Provides the flexibility to add or subtract servers as demand dictates ✓

Your answer is correct.

The correct answers are: Distributes client requests or network load efficiently across multiple servers,

Ensures high availability and reliability by sending requests only to servers that are online,

Provides the flexibility to add or subtract servers as demand dictates

Question **9**

Correct

Mark 0.25 out of 0.25

When decomposing Monolith into Microservices the key guidelines to be followed are:-

- ☒ a. Common closure principle ✓
- ☐ b. tight coupling
- ☒ c. Single responsibility principle ✓
- ☐ d. Database Sharing

Your answer is correct.

The correct answers are:

Single responsibility principle,

Common closure principle

Question **10**

Correct

Mark 0.25 out of 0.25

To make the videos viewable on different devices Netflix performs

- ☐ a. translation
- ☐ b. editing
- ☐ c. processing
- ☒ d. transcoding or encoding ✓

Your answer is correct.

The correct answer is:

transcoding or encoding

Question **11**

Incorrect

Mark 0.00 out of 0.25

Well-designed service is a service capable of being developed by a small team with minimal lead time and with minimal collaboration with other teams.

- ☐ True
- ☒ False ✗

The correct answer is 'True'.

## Question 12

Correct

Mark 0.25 out of 0.25

No SQL databases store the data differently. Select all possible data models under this approach.

- ☐ a. Row-based model
- ☒ b. Document model ✓
- ☒ c. Graph model ✓
- ☒ d. Key-value model ✓

Your answer is correct.

The correct answers are: Document model,  
Graph model,  
Key-value model

## Question 13

Correct

Mark 0.25 out of 0.25

Edge Computing is a distributed computing paradigm in which processing and computation are performed mainly on classified device nodes known as smart devices or edge devices as opposed to processed in a centralized cloud environment or data centers.

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

## Question 14

Correct

Mark 0.25 out of 0.25

The following are obstacles in decomposing an application into services

- ☐ a. None of the options
- ☒ b. Network latency ✓
- ☒ c. Obtaining a consistent view of the data ✓
- ☒ d. Reduced availability due to synchronous communication ✓

Your answer is correct.

The correct answers are:

Network latency,  
Reduced availability due to synchronous communication,  
Obtaining a consistent view of the data

Question **15**

Correct

Mark 0.25 out of 0.25

\_\_\_\_\_ separates reads and writes into different models, using commands to update data, and queries to read data.

- ☐ a. None of the options
- ☒ b. CQRS ✓
- ☐ c. cloud based databases
- ☐ d. Distributed databases

Your answer is correct.

The correct answer is:

CQRS

Question **16**

Correct

Mark 0.25 out of 0.25

\_\_\_\_\_ is the most preferred method of communication between microservices

- ☐ a. Shared databases
- ☒ b. Asynchronous Communication ✓
- ☐ c. Distributed cache
- ☐ d. Synchronous Communication

Your answer is correct.

The correct answer is:

Asynchronous Communication

Question **17**

Correct

Mark 0.25 out of 0.25

Following are the principles of scalability

- ☐ a. Maintenance and automation
- ☐ b. Scale horizontally, not vertically
- ☒ c. All of the options ✓
- ☐ d. Avoid single point of failure

Your answer is correct.

The correct answer is:

All of the options

Question **18**

Correct

Mark 0.25 out of 0.25

The CAP theorem states that a distributed system can guarantee the following characteristics:

1. Consistency
  2. Availability
  3. Partition Tolerance
- ☐ a. None of the options
  - ☐ b. Any one characteristic
  - ☒ c. Any two characteristics ✓
  - ☐ d. All the three characteristics

Your answer is correct.

The correct answer is:

Any two characteristics



Question **19**

Correct

Mark 0.25 out of 0.25

YouTube wants to store popular videos in its system. What approach should it use?

- ☐ a. None of the options
- ☒ b. Content Delivery Network ✓
- ☐ c. A big server
- ☐ d. EV cache/Distributed cache

Your answer is correct.

The correct answer is:

Content Delivery Network

Question **20**

Correct

Mark 0.25 out of 0.25

When a service communicates a change in the score of a sports game to many client web apps simultaneously. It should use

- ☐ a. Single-receiver message-based communication
- ☐ b. Asynchronous event-driven communication
- ☐ c. None of the options
- ☒ d. Push and real-time communication based on HTTP ✓

Your answer is correct.

The correct answer is: Push and real-time communication based on HTTP

[◀ Old Question Papers](#)

Jump to...