

1. Which are the 2 main API styles?
  - a. REST
  - b. Procedure Oriented
  - c. Entity Oriented
  - d. Graph
2. What is the shared responsibility model?
  - a. A model describing the responsibility of the cloud and the customer with regards of security
  - b. A requirement for the ISO 27001 standard
  - c. A model describing the responsibility within a development team
  - d. A framework for finding out the optimal security approach
3. Which of the following represent types of load balancers?
  - a. NAT
  - b. HTTP
  - c. DNS
  - d. TCP/PPD
4. Related to user access and permissions for infrastructure security, confidentiality enforces
  - a. usage of password vaults
  - b. two factor authentication
  - c. saving data only in private clouds
  - d. encryption
5. Monitoring of the virtual host is useful to ensure:
  - a. knowing your current price to pay
  - b. knowing when to scale (up/down, in/out)
  - c. knowing the size of the database
  - d. if provider respects contracts (SLA)
6. Which of the following characteristics is improved by designing and building applications in cloud environments?
  - a. Control
  - b. Scalability

- c. Availability
  - d. Security
- 7. FaaS stands for
  - a. Functions as a service
  - b. Functionality as a service
  - c. Frontend as a service
- 8. In a cloud environment the role of a load balancer is to:
  - a. balance traffic across multiple targets
  - b. A/B testing
  - c. serve as a single point of entry
  - d. monitor the health of target resources
- 9. Among the techniques for achieving high availability are:
  - a. floating/elastic IP
  - b. multi region
  - c. real time operating system
  - d. multi availability zones
- 10. What makes a system highly available?
  - a. data
  - b. software
  - c. hardware
  - d. network
- 11. Infrastructure security is concerned with
  - a. cloud user
  - b. database user
  - c. operating system user
  - d. application user
- 12. What of the following components are not managed by the cloud provider in a infrastructure as a Service model?

- a. Storage
- b. Network
- c. Operating system
- d. Application
- e. Data

13. Which are the two effective measures to improve infrastructure security?

- a. Implement OAuth 2.0
- b. MFA for the users
- c. MFA for the development team
- d. Reduce the attack surface as much as possible

14. How are the messages retrieved from queues in comparison to pub/sub systems?

The screenshot shows a web browser window with multiple tabs. The active tab is 'Exam: Attempt review' from 'moodle.cs.ubbcluj.ro'. The page displays a quiz review for 'moodleubb'. At the top, there is a header with the user's name 'Razvan Atanasov'. Below this, a yellow box contains the text: 'MFA for the development team, Reduce the attack surface as much as possible'. The main content area shows two questions. Question 14 is 'How are messages retrieved from queues in comparison to pub/sub systems?'. It has four radio button options: 'The client has the pull the messages from queues while pub/sub pushes the messages to the client' (selected and marked correct with a green check), 'The client has the pull the messages from pub/sub while queues push the messages to the client', 'The clients pull messages from both types of services', and 'Both types of services push the message to the clients'. Below the question, a yellow box states: 'Your answer is correct. The correct answer is: The client has the pull the messages from queues while pub/sub pushes the messages to the client'. Question 15 is 'What are containers useful for?'. It has four checkbox options: 'creating similar environments' (checked and marked correct), 'keeping computer clean' (checked and marked correct), 'keeping dependencies isolated from the application' (unchecked), and 'quickly provisioning dependencies locally' (checked and marked correct). The browser's address bar shows the URL 'moodle.cs.ubbcluj.ro/mod/quiz/review.php?attempt=229577&cmid=3090#'. The Windows taskbar is visible at the bottom with the time '8:47 PM' and language 'ENG'.

## 15. What are containers useful for?

The screenshot shows a web browser window with multiple tabs. The active tab is 'Exam: Attempt review' showing a Moodle quiz review page. The URL is 'moodle.cs.ubbcluj.ro/mod/quiz/review.php?attempt=229577&cmid=3090#'. The page header includes 'moodleubb' and a user profile for 'Razvan Atanasov'. The main content area displays the results for Question 15, which is 'What are containers useful for?'. The question is marked as 'Correct' with a score of '0.40 out of 0.40'. The correct answers are listed as: 'creating similar environments', 'keeping computer clean', and 'quickly provisioning dependencies locally'. The user's answer is also correct. The interface includes a sidebar with question details and a main area with the question text and answer options.

Question 15  
Correct  
Mark 0.40 out of 0.40  
Flag question

What are containers useful for?

- ☒ creating similar environments
- ☒ keeping computer clean
- ☐ keeping dependencies isolated from the application
- ☒ quickly provisioning dependencies locally

Your answer is correct.  
The correct answer is:  
The client has the pull the messages from queues while pub/sub pushes the messages to the client

Question 16  
Correct

When choosing cloud services, the price plan can be:

## 16. When choosing cloud services, the price plan can be:

The screenshot shows the same Moodle quiz review page, but now displaying the results for Question 16, which is 'When choosing cloud services, the price plan can be:'. The question is marked as 'Correct' with a score of '0.40 out of 0.40'. The correct answers are listed as: 'Dynamic', 'Fixed', and 'Tiered'. The user's answer is also correct. The interface includes a sidebar with question details and a main area with the question text and answer options.

Question 16  
Correct  
Mark 0.40 out of 0.40  
Flag question

When choosing cloud services, the price plan can be:

- ☒ Dynamic
- ☒ Fixed
- ☒ Tiered
- ☐ Transaction-based

Your answer is correct.  
The correct answers are:  
Fixed,  
Tiered,  
Dynamic

Question 17  
Correct  
Mark 0.40 out of 0.40

Virtual CPUs might be:

- ☒ timeshares of real CPU core

## 17. Virtual CPUs might be:

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your answer is correct.  
The correct answers are:  
Fixed,  
Tiered,  
Dynamic

Question 17  
Correct  
Mark 0.40 out of 0.40  
Flag question

Virtual CPUs might be:

- ☒ timeshares of real CPU core ✓
- ☐ first thread of each core
- ☒ logical core ✓
- ☒ physical core ✓

Your answer is correct.  
The correct answers are:  
timeshares of real CPU core,  
physical core,  
logical core

Question 18  
Correct

A resilient system is one that is:

## 18. A resilient system is one that is:

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timeshares of real CPU core,  
physical core,  
logical core

Question 18  
Correct  
Mark 0.40 out of 0.40  
Flag question

A resilient system is one that is:

- ☒ adaptive ✓
- ☒ self healing ✓
- ☐ self managed
- ☒ predictable ✓
- ☐ self contained

Your answer is correct.  
The correct answers are:  
adaptive,  
self healing,  
predictable

Question 19  
Partially correct  
Mark 0.20 out of 0.40

Why would you consider GraphQL instead of REST?

- ☐ Because it is easier to cache

## 19. Why would you consider GraphQL instead of REST?

The screenshot shows a Moodle quiz review interface. At the top, there's a navigation bar with tabs for 'The Neighbourhood - Soft...', 'Exam: Attempt review', and 'WhatsApp'. The browser address bar shows the URL 'moodle.cs.ubbcluj.ro/mod/quiz/review.php?attempt=229577&cmid=3090#'. Below the navigation bar, the Moodle logo 'moodleubb' is visible on the left, and a user profile 'Razvan Atanasov' is on the right. The main content area is divided into two columns. The left column contains a sidebar for 'Question 19' with the status 'Partially correct' and 'Mark 0.20 out of 0.40'. The right column shows the question text: 'Why would you consider GraphQL instead of REST?'. Below the question, there are four radio button options: 'Because it is easier to cache', 'Because it scales better', 'Because we can specify which fields to fetch leading to lower data usage' (which is selected and marked with a green checkmark), and 'Because it has built in introspection'. Below the options, there's a feedback box stating 'Your answer is partially correct. You have correctly selected 1. The correct answers are: Because we can specify which fields to fetch leading to lower data usage, Because it has built in introspection'. At the bottom of the screenshot, the start of 'Question 20' is visible: 'When can a service be considered serverless?'. The Windows taskbar at the bottom shows the time as 8:48 PM.

## 20. When can a service be considered serverless?

The screenshot shows a Moodle quiz review interface for Question 20. The navigation bar and browser address bar are identical to the previous screenshot. The Moodle logo 'moodleubb' and user profile 'Razvan Atanasov' are also present. The main content area shows the question text: 'When can a service be considered serverless?'. Below the question, there are four checked radio button options, each followed by a green checkmark: 'When the service can scale down to 0', 'When you pay only for what you use', 'When you don't have to provision capacity', and 'When you don't have to setup any infrastructure'. Below the options, there's a feedback box stating 'You have correctly selected 1. The correct answers are: Because we can specify which fields to fetch leading to lower data usage, Because it has built in introspection'. At the bottom of the screenshot, the start of 'Question 21' is visible: 'Why are serverless databases usually NoSQL?'. The Windows taskbar at the bottom shows the time as 8:48 PM.

## 21. Why are serverless databases usually noSQL?

The screenshot shows a Moodle quiz review interface. At the top, there's a navigation bar with the Moodle logo and the user's name, Razvan Atanasov. Below this, the quiz question is displayed: "Why are serverless databases usually NoSQL?". The question is marked as "Incorrect" with a score of "Mark 0.00 out of 0.40". The correct answers are listed in a yellow box: "When you don't have to setup any infrastructure," "When you don't have to provision capacity," "When you pay only for what you use," and "When the service can scale down to 0". The user's selected answers are shown in a blue box: "Because NoSQL databases usually scale better" (checked), "Due to licensing limitations of SQL databases" (checked), "Because data is non-relational in most cases anyway" (unchecked), and "Because NoSQL databases are simpler (e.g. no ACID)" (unchecked). A feedback message states: "Your answer is incorrect. The correct answers are: Because NoSQL databases usually scale better, Because NoSQL databases are simpler (e.g. no ACID)".

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Question 21  
Incorrect  
Mark 0.00 out of 0.40  
Flag question

Why are serverless databases usually NoSQL?

- ☒ Because NoSQL databases usually scale better
- ☒ Due to licensing limitations of SQL databases
- ☐ Because data is non-relational in most cases anyway
- ☐ Because NoSQL databases are simpler (e.g. no ACID)

Your answer is incorrect.  
The correct answers are:  
Because NoSQL databases usually scale better, Because NoSQL databases are simpler (e.g. no ACID)

Question 22  
Correct  
Mark 0.40 out of 0.40  
Flag question

From the kubernetes terminology, we can say that a pod:

- ☒ is the smallest deployment unit

## 22. From the kubernetes terminology, we can say that a pod:

The screenshot shows a Moodle quiz review interface. At the top, there's a navigation bar with the Moodle logo and the user's name, Razvan Atanasov. Below this, the quiz question is displayed: "From the kubernetes terminology, we can say that a pod:". The question is marked as "Correct" with a score of "Mark 0.40 out of 0.40". The correct answers are listed in a yellow box: "is the smallest deployment unit", "is managed by the operating system", "runs one or more containers", and "can span multiple nodes". The user's selected answers are shown in a blue box: "is the smallest deployment unit" (checked), "is managed by the operating system" (unchecked), "runs one or more containers" (checked), and "can span multiple nodes" (unchecked). A feedback message states: "Your answer is correct. The correct answers are: is the smallest deployment unit, runs one or more containers".

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Question 22  
Correct  
Mark 0.40 out of 0.40  
Flag question

From the kubernetes terminology, we can say that a pod:

- ☒ is the smallest deployment unit
- ☐ is managed by the operating system
- ☒ runs one or more containers
- ☐ can span multiple nodes

Your answer is correct.  
The correct answers are:  
is the smallest deployment unit,  
runs one or more containers

Question 23  
Incorrect

Which is the optimal approach for the least privilege principle when admin rights are required?

### 23. Which is the optimal approach for the least privilege principle when admin rights are required?

The screenshot shows a web browser window with multiple tabs. The active tab is 'Exam: Attempt review' showing a Moodle quiz review page. The URL is 'moodle.cs.ubbcluj.ro/mod/quiz/review.php?attempt=229577&cmid=3090#'. The page header shows the user 'Razvan Atanasov'. The main content area displays the results for 'Question 23'. The question is 'Which is the optimal approach for the least privilege principle when admin rights are required?'. The user's selected answer is 'Create a dedicated admin user used only when needed', which is marked as incorrect with a red 'X'. The correct answer is 'Leverage features that enable just-in-time privileges'. A feedback message states: 'Your answer is incorrect. The correct answer is: Leverage features that enable just-in-time privileges'. Below this, 'Question 24' is shown as correct, with the question 'Which is true for a graph database model?' and three options: 'nodes contain properties (key-value pairs)' (checked), 'relationships can't contain properties', and 'relationships are not directed'.

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The correct answers are:  
is the smallest deployment unit,  
runs one or more containers

Question 23  
Incorrect  
Mark 0.00 out of 0.40  
Flag question

Which is the optimal approach for the least privilege principle when admin rights are required?

- ☐ Enable MFA
- ☐ Relax the security policies when needed
- ☐ Leverage features that enable just-in-time privileges
- ☒ Create a dedicated admin user used only when needed

Your answer is incorrect.  
The correct answer is:  
Leverage features that enable just-in-time privileges

Question 24  
Correct  
Mark 0.40 out of 0.40  
Flag question

Which is true for a graph database model?

- ☒ nodes contain properties (key-value pairs)
- ☐ relationships can't contain properties
- ☐ relationships are not directed

### 24. Which is true for a graph database model?

The screenshot shows the same Moodle quiz review page, but now 'Question 24' is the focus. The question is 'Which is true for a graph database model?'. The user's selected answer is 'Create a dedicated admin user used only when needed', which is marked as incorrect with a red 'X'. The correct answer is 'Leverage features that enable just-in-time privileges'. A feedback message states: 'Your answer is incorrect. The correct answer is: Leverage features that enable just-in-time privileges'. Below this, 'Question 24' is shown as correct, with the question 'Which is true for a graph database model?' and three options: 'nodes contain properties (key-value pairs)' (checked), 'relationships can't contain properties', and 'relationships are not directed'. The correct answers are listed as 'contains nodes and relationships' and 'nodes contain properties (key-value pairs)'. Below this, 'Question 25' is shown as correct, with the question 'A key-value database offers:'.

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Your answer is incorrect.  
The correct answer is:  
Leverage features that enable just-in-time privileges

Question 24  
Correct  
Mark 0.40 out of 0.40  
Flag question

Which is true for a graph database model?

- ☒ nodes contain properties (key-value pairs)
- ☐ relationships can't contain properties
- ☐ relationships are not directed

Your answer is correct.  
The correct answers are:  
contains nodes and relationships,  
nodes contain properties (key-value pairs)

Question 25  
Correct

A key-value database offers:



## 25. A key-value database offers:

The screenshot shows a web browser window with multiple tabs. The active tab is 'Exam: Attempt review' on the Moodle website 'moodle.cs.ubbcluj.ro'. The URL is 'moodle.cs.ubbcluj.ro/mod/quiz/review.php?attempt=229577&cmid=3090#'. The page header shows the user 'Razvan Atanasov' and a 'Paused' status. The main content area displays the review for 'Question 25', which is marked 'Correct' with a score of '0.40 out of 0.40'. The question text is 'A key-value database offers:'. Below the question, there are four radio button options: 'ultra low but not consistent latency', 'high and consistent throughput', 'ultra low and consistent latency', and 'high but not consistent throughput'. The 'ultra low and consistent latency' option is selected and marked with a green checkmark. Above the question, an orange box states: 'The correct answers are: contains nodes and relationships, nodes contain properties (key-value pairs)'. Below the question, another orange box states: 'Your answer is correct. The correct answers are: ultra low and consistent latency, high and consistent throughput'. At the bottom of the page, there are links for 'Announcements', a 'Jump to...' dropdown menu, and buttons for 'Finish review' and 'Resource Cleanup'. The Windows taskbar is visible at the bottom of the screen.

moodleubb

Question 25  
Correct  
Mark 0.40 out of 0.40  
Flag question

The correct answers are:  
contains nodes and relationships,  
nodes contain properties (key-value pairs)

A key-value database offers:

- ☐ ultra low but not consistent latency
- ☒ high and consistent throughput
- ☒ ultra low and consistent latency
- ☐ high but not consistent throughput

Your answer is correct.  
The correct answers are:  
ultra low and consistent latency,  
high and consistent throughput

Announcements

Jump to...

Finish review

Resource Cleanup