

Introduction to Data Structure (Data Management) Finals

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- 1 -

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Mid Terms

- Access at the Old IELMS website
 - <http://ieilmsold.jbnu.ac.kr/mod/quiz/view.php?id=281626>
- Date available and answerable
 - 2:00 pm 16th - 11:55 pm 18th Dec 2020
- Information:
 - NoSQL, JSon, AsterixDB, SQL++, Query Optimization, Indexes, Data Storage Basics, Query Optimization Basics, Cost of Reading Data from Disk, Parallel DBs, Distributed Query Processing, E/R Diagrams, Constraints
 - There are 17 items with varied points per item for a total of 100 points
 - They are True/False, Multiple Choice, Matching Type
 - Answers automatically checked by the system! Be very careful...



True or False

The screenshot shows a web interface for a quiz titled "Data Structure [0000121744_1]". The user is VISTA FELIPE PATINO. The quiz is titled "데이터구조" (Data Structure) and is for the "16Week [15 December - 21 December]" period. The current page is a "Preview" of "Question 2". The question is "JJson (2 points)" and asks "JJson is NOT an example of semi-structured data." with options "True" and "False". The interface includes a "Quiz navigation" sidebar with buttons for questions 1 through 17, a "Finish attempt ..." button, and a "Start a new preview" button. There are also "Previous page" and "Next page" buttons at the bottom of the question area.

Questions and corresponding pt/question

To go to **previous** item, current page is saved.

To go to **next** item, current page is saved

Multiple Choice

Indexes (4 points)

Index Selection Problem:

Suppose the database has these indexes, V(M, N, P), which one(s) can the optimizer NOT use?

V(M, N, P);

```
SELECT *  
FROM V  
WHERE V.M = 33
```

```
SELECT *  
FROM V  
WHERE V.M = 33  
AND V.P = 55
```

Select one:

☐ a.

INDEX I3 ON V(P, M);

☐ b.

INDEX I1 ON V(M);

☐ c.

INDEX I2 ON V(M, P);

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Be Very careful

Same Question but **answers** sorted differently
everytime there is **NEW Attempt in Answering** and for **Each student**.

Matching Type

Question 5
Not yet
answered
Marked out of
6.00
Flag
question
Edit
question

AsterixDB (6 points)

Match the given examples to their corresponding
Asterix Data Model:

Example #2

`{"Mikki": " ", "age": 29}`

Example #1

`[2, 4, "Nwabs", 6, 8]`

Example #3

`{{2, 4, "Khan", "Khan", 6, 6, 8}}`

Choose...
Arrays
Objects
Sets
Bags
Choose... ▼

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Choose... ▼

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Submitting Final Exams

The screenshot shows a quiz interface. On the left, a grid of question numbers 1 through 17 is displayed. Below the grid is an orange button labeled 'Finish attempt ...'. A callout bubble points to this button with the text: 'To **finalize** all items and submit.'

The main area of the interface shows a message: 'You can preview this quiz, but if this were a real attempt, you would be blocked because: This quiz is not currently available'. Below this, a question card for 'Question 17' is shown. The question is 'Constraints (8 points) Which one is NOT a SQL Constraint?'. The options are: a. Keys, Foreign Keys, b. Tuple-level constraints, c. Global constraints, d. Memory constraints, e. Attribute-level constraints. At the bottom of the question card is a blue button labeled 'Finish attempt ...'. A second callout bubble points to this button with the text: 'To **finalize** all items and submit.'

Thank you.