

# RDBMS Concepts

## Assessment Fact Sheet

### Overview

The Relational Database Management System Concepts test measures knowledge of the most important aspects of RDBMS. Designed for both programmers and administrators.

Job Family/Title	System Administrator, Database Administrator, System Designer, Programmers
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### Details

Average Testing Time (minutes)	35 minutes
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Allowed Time (minutes)	90 minutes
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Maximum Number of Questions	30 questions
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Designed for Unproctored Environment	Yes
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Question Format	Multiple Choice - Adaptive
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Product Category	Information Technology
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### Knowledge, Skills, Abilities and Competencies Measured

The following areas are covered:

- Data Modeling
- Managing Databases and Enterprises
- Normalization
- Physical Database Design
- Relational Data Model
- SQL Application Development
- SQL Query Development
- Troubleshooting Existing Applications

## Example Questions

You are tasked with improving the performance of a query run against the TbOrdersLast30Days table. TbOrdersLast30Days is updated with new data after every business day and contains only the data for the most recent 30 days. The structure of the table cannot be changed and the only index is a clustered index that enforces a primary key on the OrderNo, PartNo, and CustomerNo fields. This index cannot be changed, but new indexes can be added.

TbOrdersLast30Days contains the following fields:  
OrderNo  
PartNo  
CustomerNo  
CustomerRegionCode  
PartDescription  
PartNoQuantity  
PartNoUnitCost  
OrderDayMonth (string formatted as DDMM)

The select query follows this:  
SELECT OrderDayMonth, SUM(PartNoUnitCost\*PartNoQuantity) as  
DayOrderTotal  
FROM TbOrdersForMonth  
GROUP BY OrderDayMonth

Based on the scenario above, what index option provides the most performance gain for the query?

- a  Add one non-clustered index on each of the three columns: OrderDayMonth, PartNoUnitCost, and PartNoQuantity.
- b  Add one clustered index on each of the three columns: OrderDayMonth, PartNoUnitCost, and PartNoQuantity.
- c  Add one non-clustered index on OrderDayMonth, PartNoUnitCost, and PartNoQuantity.
- d  Add one non-clustered index on each of the two columns: PartUnitCost and PartNoQuantity.
- e  Add one non-clustered index on PartNoUnitCost and PartNoQuantity.

## Example Reports

**Test: RDBMS Concepts**  
This report is confidential and its contents are intended to assist in the prediction of an applicant's work behavior. If you would like more information about this interpretive report or other products that SHL offers, please contact your account representative.

**Score: 3.45**

**Proficiency Level: Proficient (2.51 - 3.50)**

The candidate has mastered the basic concepts of RDBMS Concepts, including:

- Relational Data Model
- SQL Query Development
- Data Models

The candidate demonstrates a clear understanding of intermediate RDBMS Concepts concepts, such as:

- Manage Databases and Enterprises
- SQL Application Development
- Physical Database Design

The candidate may have some knowledge of more advanced RDBMS Concepts concepts such as:

- Troubleshoot Existing Applications
- Normalization

At the Proficient level, the candidate will be capable of working on most projects involving RDBMS Concepts with minimal assistance. However, the candidate will probably require more assistance with advanced concepts.

### Percentile Comparisons

The percentile score indicates how well the candidate scored relative to other candidates in the comparison population indicated by the score.



### Detail Item Results

Order	Question	Topic	Description	Skill Level	Time Taken (Seconds)	Is Correct
1	RDBMS_CONCEPTS_R2_BB_2158	Physical Database Design	Index Management	Intermediate	54.3	Yes
2	RDBMS_CONCEPTS_R2_BB_1342	Troubleshoot Existing Applications	Modify Physical Data Model	Advanced	17.8	No
3	RDBMS_CONCEPTS_R2_BB_2257	Manage Databases and Enterprises	Database System Architectures	Intermediate	22.1	Yes