

1. Relational data uses _____ to enforce relationships between different tables.

- a) collections
- b) rows
- c) keys
- d) partitions

Answer : C

2. You have an inventory management database that contains the following table.

ProductName	Quantity
Product1	100
Product2	129
Product3	176

Which statement should you use in a SQL query to change the inventory quantity of Product1 to 270?

- a) INSERT
- b) MERGEPOI
- c) UPDATE
- d) CREATE

Answer : C

3. Your company needs to implement a relational database in Azure. The solution must minimize ongoing maintenance

Which Azure service should you use?

- a) Azure HDInsight
- b) Azure SQL Database
- c) Azure Cosmos DB
- d) SQL Server on Azure Virtual Machines

Answer : B

4. You are writing a set of SQL queries that administrators will use to troubleshoot an Azure SQL database.

You need to embed documents and query results into a SQL notebook. What should you use?

- a) Microsoft SQL Server Management Studio (SSMS)
- b) Azure Data Studio
- c) Azure CLI
- d) Azure PowerShell

Answer : B

5. You have an e-commerce application that reads and writes data to an Azure SQL database. Which type of processing does the application use?

- a) stream processing
- b) batch processing
- c) Online Analytical Processing (OLAP)
- d) Online Transaction Processing (OLTP)

Answer : D

6. When can you use an Azure Resource Manager template?

- a) to automate the creation of an interdependent group of Azure resources in a repeatable way
- b) to apply Azure policies for multi-tenant deployments
- c) to provision Azure subscriptions
- d) to control which services and feature administrators and developers can deploy from the Azure portal

Answer : A

7. You have an Azure SQL database that you access directly from the Internet. You recently changed the public IP address of your computer. After changing the IP address, you can no longer access the database. You can connect to other resources in Azure. What is a possible cause of the issue?

- a) role-based access control (RBAC)
- b) Dynamic Host Configuration Protocol (DHCP)
- c) Domain Name Service (DNS)
- d) a database-level firewall

Answer : D

8. Which command-line tool can you use to query Azure SQL databases?

- a) sqlcmd
- b) bcp
- c) azdata
- d) Azure CLI

Answer : A

9. DRAG DROP -

Match the terms to the appropriate descriptions.

To answer, drag the appropriate term from the column on the left to its description on the right. Each term may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Select and Place:

Terms

Index
View
Table

Answer Area

	A database object that holds data
	A database object whose content is defined by a query
	A database object that helps improve the speed of data retrieval

Answer :

Terms

Index
View
Table

Answer Area

Table	A database object that holds data
View	A database object whose content is defined by a query
Index	A database object that helps improve the speed of data retrieval

10. DRAG DROP -

Match the tools to the appropriate descriptions.

To answer, drag the appropriate tool from the column on the left to its description on the right. Each tool may be used once, more than once, or not at all.

Select and Place:

Tools

Azure Data Studio
Microsoft SQL Server Data Tools (SSDT)
Microsoft SQL Server Management Studio (SSMS)

Answer Area

Tool	A graphical tool for managing SQL Server or Azure SQL databases that supports access, configuration, management, and administration tasks.
Tool	A lightweight editor that can run on-demand SQL queries and view and save results as text, JSON, or Microsoft Excel files.
Tool	A development tool for building Azure SQL databases, Microsoft SQL Server relational databases, SQL Server Analysis Services (SSAS) data models, SQL Server Integration Services (SSIS) packages, and SQL Server Reporting Services (SSRS) reports.

Answer :

Tools

Answer Area

Microsoft SQL Server Management Studio (SSMS)	A graphical tool for managing SQL Server or Azure SQL databases that supports access, configuration, management, and administration tasks.
Azure Data Studio	A lightweight editor that can run on-demand SQL queries and view and save results as text, JSON, or Microsoft Excel files.
Microsoft SQL Server Data Tools (SSDT)	A development tool for building Azure SQL databases, Microsoft SQL Server relational databases, SQL Server Analysis Services (SSAS) data models, SQL Server Integration Services (SSIS) packages, and SQL Server Reporting Services (SSRS) reports.

11. HOTSPOT -

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Statements	Yes	No
Relational database tables contain columns and rows	<input type="radio"/>	<input type="radio"/>
Indexes in a relational database describe the data types in a table	<input type="radio"/>	<input type="radio"/>
A database view is a virtual table whose content is defined by a query	<input type="radio"/>	<input type="radio"/>

Answer :

Answer Area

Statements	Yes	No
Relational database tables contain columns and rows	<input checked="" type="radio"/>	<input type="radio"/>
Indexes in a relational database describe the data types in a table	<input type="radio"/>	<input checked="" type="radio"/>
A database view is a virtual table whose content is defined by a query	<input checked="" type="radio"/>	<input type="radio"/>

12. HOTSPOT -

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Statements	Yes	No
Azure SQL Database includes a managed backup service.	<input type="radio"/>	<input type="radio"/>
Azure SQL Database has built-in high availability.	<input type="radio"/>	<input type="radio"/>
Azure SQL Database can use Azure Defender.	<input type="radio"/>	<input type="radio"/>

Statements	Yes	No
Azure SQL Database includes a managed backup service.	<input checked="" type="radio"/>	<input type="radio"/>
Azure SQL Database has built-in high availability.	<input checked="" type="radio"/>	<input type="radio"/>
Azure SQL Database can use Azure Defender.	<input checked="" type="radio"/>	<input type="radio"/>

13. HOTSPOT -

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Statements	Yes	No
You can use Azure Data Studio to query a Microsoft SQL Server big data cluster.	<input type="radio"/>	<input type="radio"/>
You can use Microsoft SQL Server Management Studio (SSMS) to query an Azure Synapse Analytics data warehouse.	<input type="radio"/>	<input type="radio"/>
You can use MySQL Workbench to query Azure Database for MariaDB databases.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
You can use Azure Data Studio to query a Microsoft SQL Server big data cluster.	<input checked="" type="radio"/>	<input type="radio"/>
You can use Microsoft SQL Server Management Studio (SSMS) to query an Azure Synapse Analytics data warehouse.	<input checked="" type="radio"/>	<input type="radio"/>
You can use MySQL Workbench to query Azure Database for MariaDB databases.	<input checked="" type="radio"/>	<input type="radio"/>

14. HOTSPOT -

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Statements	Yes	No
Platform as a service (PaaS) database offerings in Azure provide built-in high availability.	<input type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure provide configurable scaling options.	<input type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure reduce the administrative overhead for managing hardware.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
Platform as a service (PaaS) database offerings in Azure provide built-in high availability.	<input checked="" type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure provide configurable scaling options.	<input checked="" type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure reduce the administrative overhead for managing hardware.	<input checked="" type="radio"/>	<input type="radio"/>

15. HOTSPOT -

You have the following SQL query.

```
INSERT INTO dbo.Products (ProductID, ProductName, Price, ProductDescription)
VALUES (1, 'Clamp', 12.48, 'Workbench clamp') ;
```

What are dbo.Products and ProductName? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Dbo.Products :	<div><div></div><div>A column</div><div>A database</div><div>A table</div><div>An index</div></div>
ProductName :	<div><div></div><div>A column</div><div>A database</div><div>A table</div><div>An index</div></div>

Answer Area

Dbo.Products :	<div><div></div><div>A column</div><div>A database</div><div>A table</div><div>An index</div></div>
ProductName :	<div><div></div><div>A column</div><div>A database</div><div>A table</div><div>An index</div></div>

16. Descriptive analytics tells you _____

- a) What is most likely to occur in the future
- b) What occurred in the past
- c) Which actions you can perform to affect outcomes
- d) Why something occurred in the past

Answer : B

17. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Statements	Yes	No
Normalization involves eliminating relationships between database tables.	<input type="radio"/>	<input type="radio"/>
Normalizing a database reduces data redundancy.	<input type="radio"/>	<input type="radio"/>
Normalization improves data integrity.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
Normalization involves eliminating relationships between database tables.	<input type="radio"/>	<input checked="" type="radio"/>
Normalizing a database reduces data redundancy.	<input checked="" type="radio"/>	<input type="radio"/>
Normalization improves data integrity.	<input checked="" type="radio"/>	<input type="radio"/>

18. An extract, transform, and load (ETL) process requires _____

- a) a matching schema in the data source and the data target
- b) a target data store powerful enough to transform data
- c) data that is fully processed before being loaded to the target data store
- d) that the data target be a relational database

Answer : C

19. In batch processing, _____

- a) data is always inserted one row at a time
- b) data is processed in real-time
- c) latency in delivering data processing results is acceptable
- d) processing can only execute serially

Answer : C

20. Transcribing audio files is an example of _____ analytics

- a) cognitive
- b) descriptive
- c) predictive
- d) prescriptive

Answer : A

21. The massively parallel processing (MPP) engine of Azure Synapse Analytics _____

- a) distributes processing across compute nodes
- b) distributes processing across control nodes
- c) redirects client connections across compute nodes
- d) redirects client connections across control nodes

Answer : A

22. _____ is an object associated with a table that stores the data rows in the table based on their key values.

- a) A clustered index
- b) A FileTable
- c) A foreign key
- d) A stored procedure

Answer : A

23. A relational database is appropriate for scenarios that involve a high volume of _____

- a) Changes to relationships between entities
- b) Geographically distributed writes
- c) Transactional writes
- d) Writes that have varying data structures

Answer : C

24. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
Batch processing can output data to a file store	<input type="radio"/>	<input type="radio"/>
Batch processing can output data to a relational database	<input type="radio"/>	<input type="radio"/>
Batch processing can output data to a NoSQL database	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
Batch processing can output data to a file store	<input checked="" type="radio"/>	<input type="radio"/>
Batch processing can output data to a relational database	<input type="radio"/>	<input checked="" type="radio"/>
Batch processing can output data to a NoSQL database	<input type="radio"/>	<input checked="" type="radio"/>

25. Drag & Drop.

Locations

An in-memory data integration tool

The CRM system

The data warehouse

Answer Area

Extract: Location

Load: Location

Transform: Location

Locations

An in-memory data integration tool

The CRM system

The data warehouse

Answer Area

Extract: The CRM system

Load: The data warehouse

Transform: An in-memory data integration tool

26. A visualization that shows a university's current student enrollment versus the maximum capacity is an example of _____ analytics

- a) cognitive
- b) descriptive
- c) predictive
- d) prescriptive

Answer : B

27. You need to create an Azure Storage account.

Data in the account must replicate outside the Azure region automatically.

Which two types of replication can you use for the storage account? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- a) zone-redundant storage (ZRS)
- b) read-access geo-redundant storage (RA-GRS)
- c) locally-redundant storage (LRS)
- d) geo-redundant storage (GRS)

Answer : BD

28. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
Platform as a service (PaaS) database offerings in Azure require less setup and configuration effort than infrastructure as a service (IaaS) database offerings.	<input type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure provide end users with the ability to control and update the operating system version.	<input type="radio"/>	<input type="radio"/>
All relation and non-relational platform as a service (PaaS) database offerings in Azure can be paused to reduce costs.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
Platform as a service (PaaS) database offerings in Azure require less setup and configuration effort than infrastructure as a service (IaaS) database offerings.	<input checked="" type="radio"/>	<input type="radio"/>
Platform as a service (PaaS) database offerings in Azure provide end users with the ability to control and update the operating system version.	<input type="radio"/>	<input checked="" type="radio"/>
All relation and non-relational platform as a service (PaaS) database offerings in Azure can be paused to reduce costs.	<input type="radio"/>	<input checked="" type="radio"/>

29. Which statement is an example of Data Manipulation Language (DML)?

- a) REVOKE
- b) DISABLE
- c) INSERT
- d) GRANT

Answer : C

30. You have a SQL query that combines customer data and order data. The query includes calculated columns. You need to create a database object that would allow other users to rerun the same SQL query. What should you create?

- a) an index
- b) a view
- c) a scalar function
- d) a table

Answer : B

31. A key/value data store is optimized for _____

- a) enforcing constraints
- b) simple lookups
- c) table joins
- d) transactions

Answer : B

32. Drag & Drop

Data Types	Answer Area
Image files	Data type Azure Blob storage
Key/value pairs	Data type Azure Cosmos DB Gremlin API
Relationships between employees	Data type Azure Table storage

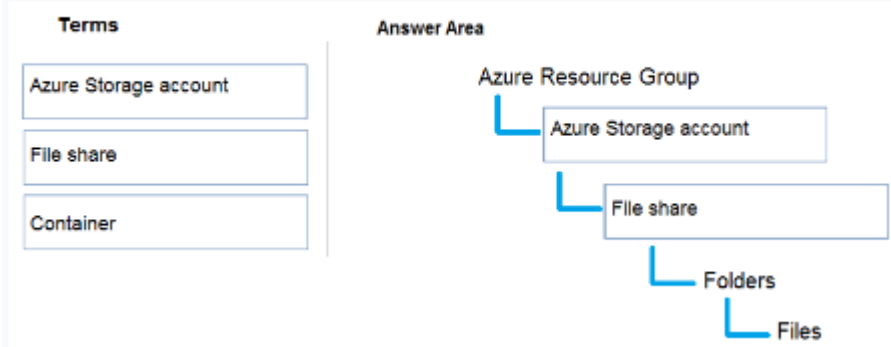
Correct Answer:

Data Types	Answer Area
Image files	Image files Azure Blob storage
Key/value pairs	Key/value pairs Azure Cosmos DB Gremlin API
Relationships between employees	Relationships between employees Azure Table storage

33. Drag & Drop

Terms	Answer Area
Azure Storage account	Azure Resource Group
File share	Term
Container	Term
	Folders
	Files

Correct Answer:



34. What are two characteristics of real-time data processing? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

- a) Data is processed periodically
- b) Low latency is expected
- c) High latency is acceptable
- d) Data is processed as it is created

Answer : BD

35. Drag & Drop

Components	Answer Area
Dataset	Component: A representation of data structures within data stores
Linked service	Component: The information used to connect to external resources
Mapping data flow	Component: A logical grouping of activities that performs a unit of work and can be scheduled
Pipeline	

Correct Answer:

Components	Answer Area
Dataset	Dataset: A representation of data structures within data stores
Linked service	Linked service: The information used to connect to external resources
Mapping data flow	
Pipeline	Pipeline: A logical grouping of activities that performs a unit of work and can be scheduled

36. Drag & Drop

Workload Types	Answer Area
Batch	Workload type: Data for a product catalog will be loaded every 12 hours to a data warehouse.
Streaming	Workload type: Thousands of data sets per second for online purchases will be loaded into a data warehouse in real time
	Workload type: Updates to inventory data will be loaded to a data warehouse every 1 million transactions.

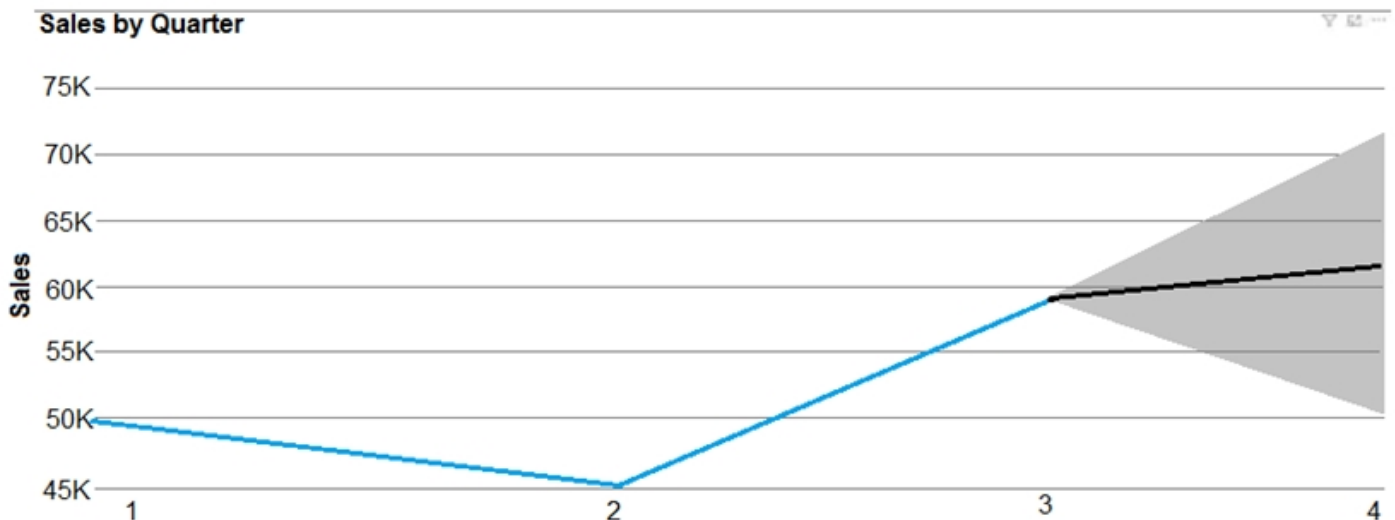
Correct Answer:

Workload Types	Answer Area
<input type="button" value="Batch"/>	<input type="button" value="Batch"/> Data for a product catalog will be loaded every 12 hours to a data warehouse.
<input type="button" value="Streaming"/>	<input type="button" value="Streaming"/> Thousands of data sets per second for online purchases will be loaded into a data warehouse in real time
	<input type="button" value="Batch"/> Updates to inventory data will be loaded to a data warehouse every 1 million transactions.

37. Drag & Drop

A standalone data analysis tool	Extract:	<input type="text"/>
The CRM system	Load:	<input type="text"/>
The data warehouse	Transform:	<input type="text"/>
<input type="text"/>	Extract:	The CRM system
<input type="text"/>	Load:	The data warehouse
<input type="text"/>	Transform:	A standalone data analysis tool

38. Your company recently reported sales from the third quarter. You have the chart shown in the following exhibit.



Which type of analysis is shown in the fourth quarter?

- a) predictive
- b) prescriptive
- c) descriptive
- d) diagnostic

Answer : B

39. Which statement is an example of Data Manipulation Language (DML)?

- a) REVOKE

- b) DISABLE
- c) CREATE
- d) UPDATE

Answer : D

40. Creating closed caption text for audio files is an example of _____ analytics

- a) Cognitive
- b) Descriptive
- c) Predictive
- d) Prescriptive

Answer : B

41. A visualization that illustrates a university's current student enrolment per department is an example of _____ analytics

- a) Cognitive
- b) Descriptive
- c) Predictive
- d) Prescriptive

Answer : B

42. An extract, load, and transform (ELT) process requires _____

- a) A separate transformation engine
- b) A target data store powerful enough to transform data
- c) Data that is fully processed before being loaded to the target data store
- d) A data pipeline that includes a transformation engine

Answer : B

43. You need to create an Azure resource to store data in Azure Table storage. Which command should you run?

- a) az storage share create
- b) az storage account create
- c) az cosmosdb create
- d) az storage container create

Answer : D

44. The Azure Cosmos DB _____ API enables the use of SELECT statements to retrieve documents from Azure Cosmos DB

- a) Core (SQL)
- b) Gremlin
- c) MongoDB

d) Table

Answer : A

45. You need to modify a view in a relational database by adding a new column. Which statement should you use?

- a) MERGE
- b) ALTER
- c) INSERT
- d) UPDATE

Answer : B

46. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
Extract, transform, and load (ETL) can reduce the transfer of sensitive data to destination systems.	<input type="radio"/>	<input type="radio"/>
Extract, load, and transform (ELT) transforms data by using a compute resource independent of the source system and destination system.	<input type="radio"/>	<input type="radio"/>
Extract, load, and transform (ELT) minimizes the time it takes to copy large volumes of data to destination systems.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
Extract, transform, and load (ETL) can reduce the transfer of sensitive data to destination systems.	<input type="radio"/>	<input checked="" type="radio"/>
Extract, load, and transform (ELT) transforms data by using a compute resource independent of the source system and destination system.	<input checked="" type="radio"/>	<input type="radio"/>
Extract, load, and transform (ELT) minimizes the time it takes to copy large volumes of data to destination systems.	<input type="radio"/>	<input checked="" type="radio"/>

47. You plan to deploy a PostgreSQL database to Azure. Which hosting model corresponds to the available deployment options?

PostgreSQL on Azure VMs: _____

Azure Database for PostgreSQL : _____

- a) Infrastructure as a service (IaaS)
- b) Platform as a service (PaaS)
- c) Software as a service (SaaS)

Answer : CB

48. _____ natively support the analysis of relationships between entities.

- a) Column family databases

- b) Document databases
- c) Graph databases
- d) Key-value stores

Answer : C

49. Which Azure storage solution provides native support for intellsense

-compliant access control lists (ACLs)?

- a) Azure Table storage
- b) Azure Dmata Lake Storage
- c) Azure Queue storage
- d) Azure Files

Answer : B

50. Relational data is stored in _____

- a) A file system as unstructured data
- b) A hierarchal folder structure
- c) A tabular form of rows and columns
- d) Comma-seperated value (CSV) files

Answer : C

51. _____ physically sorts the data in a table based on the **values in a specified column**.

- a) A view
- b) A clustered index
- c) A stored procedure
- d) A nonclustered index

Answer : B

52. **A block of code** that runs in a database is called _____

- a) A stored procedure
- b) A table
- c) A view
- d) An index

Answer : A

53. _____ presents **content defined** by a query

- a) A heap
- b) A stored procedure
- c) A view
- d) An index

Answer: C

54. Which type of database is **Azure Database for PostgreSQL**?

- a) Platform as a service (PaaS)
- b) Infrastructure as a service (IaaS)
- c) Microsoft SQL Server
- d) on-premises

Answer : A

55. Which storage solution supports **access control lists (ACLs)** at the file and folder level?

- a) Azure Data Lake Storage
- b) Azure Queue storage
- c) Azure Blob storage
- d) Azure Cosmos DB

Answer : A

56. A _____ is a chart of **colored rectangles**. The size of the rectangles represent the relative value of each item. The chart can be hierarchical, displaying data as a set of rectangles nested within the main rectangle

- a) Line chart
- b) Matrix
- c) Scatter
- d) Treemap

Answer : D

57. What is a characteristic of **batch processing**?

- a) The data ingested during batch processing must be processed as soon as the data is received.
- b) Large datasets must be split into batches of less than 1 GB before the data can be processed.
- c) There is a noticeable time delay between **ingesting data** and obtaining the data processing results.
- d) Batch processing can only process data that is structured.

Answer : C

58. In a SQL statement, _____ are examples of aggregate functions.

- a) FROM and WHERE
- b) GROUP BY and ORDER BY
- c) JOIN and MERGE
- d) MAX and MIN

Answer : D

59. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
A job that processes sales data once daily is an example of a batch workload.	<input type="radio"/>	<input type="radio"/>
A job that calculates a rolling average temperature reading is an example of a streaming workload.	<input type="radio"/>	<input type="radio"/>
A job that calculates average revenue per product for the last month is an example of a streaming workload.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
A job that processes sales data once daily is an example of a batch workload.	<input checked="" type="radio"/>	<input type="radio"/>
A job that calculates a rolling average temperature reading is an example of a streaming workload.	<input checked="" type="radio"/>	<input type="radio"/>
A job that calculates average revenue per product for the last month is an example of a streaming workload.	<input type="radio"/>	<input checked="" type="radio"/>

60. In a relational database, each **row in a table** has _____

- a) A different set of columns
- b) A key-value pair
- c) The same set of columns
- d) Unstructured data

Answer : C

61. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Answer Area

Statements	Yes	No
Normalizing a database increases the throughput of writing transactions.	<input type="radio"/>	<input type="radio"/>
Analytics systems are more normalized than transactional systems.	<input type="radio"/>	<input type="radio"/>
Normalizing a database results in queries that require more joins.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

Statements	Yes	No
Normalizing a database increases the throughput of writing transactions.	<input type="radio"/>	<input checked="" type="radio"/>
Analytics systems are more normalized than transactional systems.	<input type="radio"/>	<input checked="" type="radio"/>
Normalizing a database results in queries that require more joins.	<input checked="" type="radio"/>	<input type="radio"/>

62. _____ natively support the analysis of relationships between **entities**

- a) Column family databases
- b) Document databases
- c) Graph databases

- d) Key-value stores

Answer : C

63. A **key/value data** store is optimized for _____

- a) Enforcing constraints
- b) Simple lookups
- c) Table joins

Answer : B

64. In an **infrastructure as a service (IaaS)** instance of _____ that hosts SQL server Microsoft SQL server on Azure, you manage the _____

- a) Elastic pool
- b) MySQL server
- c) PostgreSQL server
- d) Virtual machine

Answer : virtual machine

65. Varying fields for each **entity in a JSON document** is an example of _____

- a) Relational data
- b) Semi-structured data
- c) Structured data
- d) Unstructured data

Answer : B

66. A **JSON document** is an example of _____

- a) Graph data
- b) Relational data
- c) Semi-structured data
- d) Unstructured data

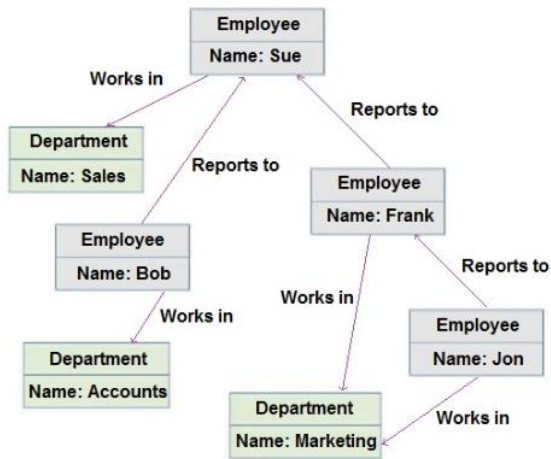
Answer : C

67. Which property of a transactional workload guarantees that each transaction is treated as a single unit that either **succeeds completely or fails completely**?

- a) atomicity
- b) isolation
- c) durability
- d) consistency

Answer : A

68. You have a data store that has the structure shown in the following exhibit.



Which type of data store is this?

- a) key/value
- b) object data
- c) graph
- d) time series

Answer : C

69. Which type of database contains **nodes and edges**?

- a) graph
- b) key/value
- c) columnar
- d) time series

Answer : A

70. _____ is responsible for identifying which business rules must be **applied to the data of a company**

- a) a data analyst
- b) a data engineer
- c) a data scientist

Answer : A

71. Relational data uses _____ to **enforce relationships between different tables**.

- a) Collections
- b) Rows
- c) Keys
- d) Partitions

Answer : C

72. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
You must apply operating system updates to Azure SQL databases regularly.	<input type="radio"/>	<input type="radio"/>
You need a Microsoft 365 subscription to create an Azure SQL database.	<input type="radio"/>	<input type="radio"/>
You can use existing Microsoft SQL Server licenses to reduce the cost of Azure SQL databases.	<input type="radio"/>	<input type="radio"/>

Answer Area

Statements	Yes	No
You must apply operating system updates to Azure SQL databases regularly.	<input type="radio"/>	<input checked="" type="radio"/>
You need a Microsoft 365 subscription to create an Azure SQL database.	<input type="radio"/>	<input checked="" type="radio"/>
You can use existing Microsoft SQL Server licenses to reduce the cost of Azure SQL databases.	<input checked="" type="radio"/>	<input type="radio"/>

73. Which statement is an example of Data Definition Language (DDL)?

- a) SELECT
- b) JOIN
- c) UPDATE
- d) CREATE

Answer : D

74. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
Azure Data Studio can be used to query an Azure SQL database from a device that runs macOS.	<input type="radio"/>	<input type="radio"/>
Microsoft SQL Server Management Studio (SSMS) enables users to create and use SQL notebooks.	<input type="radio"/>	<input type="radio"/>
Azure Data Studio can be used to restore a database.	<input type="radio"/>	<input type="radio"/>

Statements	Yes	No
Azure Data Studio can be used to query an Azure SQL database from a device that runs macOS.	<input checked="" type="radio"/>	<input type="radio"/>
Microsoft SQL Server Management Studio (SSMS) enables users to create and use SQL notebooks.	<input type="radio"/>	<input checked="" type="radio"/>
Azure Data Studio can be used to restore a database.	<input checked="" type="radio"/>	<input type="radio"/>

75. You are deploying a software as a service (SaaS) application that requires a **relational database** for Online Transaction Processing (OLTP). Which Azure service should you use to support the application?

- a) Azure Cosmos DB
- b) Azure HDInsight
- c) Azure SQL Database
- d) Azure Synapse Analytics
- e)

Answer: C

76. What are two benefits of platform as a service (**PaaS**) **relational database offerings** in Azure, such as Azure SQL Database? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

- a) access to the latest features
- b) complete control over backup and restore processes
- c) in-database machine learning services
- d) reduced administrative effort for managing the server infrastructure

Answer: AD

77. For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Statements	Yes	No
If you have a platform as a service (PaaS) database in Azure, you are responsible for applying operating system updates.	<input type="radio"/>	<input type="radio"/>
If you have a platform as a service (PaaS) database in Azure, backups are performed automatically.	<input type="radio"/>	<input type="radio"/>
If you have a platform as a service (PaaS) database in Azure, you are responsible for installation of the database engine.	<input type="radio"/>	<input type="radio"/>

Statements	Yes	No
If you have a platform as a service (PaaS) database in Azure, you are responsible for applying operating system updates.	<input type="radio"/>	<input checked="" type="radio"/>
If you have a platform as a service (PaaS) database in Azure, backups are performed automatically.	<input checked="" type="radio"/>	<input type="radio"/>
If you have a platform as a service (PaaS) database in Azure, you are responsible for installation of the database engine.	<input type="radio"/>	<input checked="" type="radio"/>

78. You have a table named Sales that contains the following data.

SalesDate	SalesAmount	ProductID
4-Apr-20	\$2,000	1
5-Apr-20	\$40	2
5-Apr-20	\$2,300	1
6-Apr-20	\$40	3
6-Apr-20	\$200	4

You need to query the table to return the average sales amount per day. The output must produce the following results.

SalesDate	AVG(SalesAmount)
4-Apr-20	\$2,000
5-Apr-20	\$1,170
6-Apr-20	\$120

How should you complete the query? To answer, drag the appropriate values to the correct targets. Each value may be used once, more than once, or not at all.

You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Values

CREATE

GROUP BY

ORDER BY

SELECT

Answer Area

ValueSalesDate, AVG(SalesAmount)

FROM Sales

ValueSalesDate

ORDER BY SalesDate

Values

CREATE

GROUP BY

ORDER BY

SELECT

Answer Area

SELECTSalesDate, AVG(SalesAmount)

FROM Sales

GROUP BYSalesDate

ORDER BY SalesDate

79. When you create an Azure SQL database, which **account can always connect to the database?**

- a) the Azure Active Directory (Azure AD) account that created the database
- b) the server admin login account of the logical server
- c) the Azure Active Directory (Azure AD) administrator account
- d) the sa account

Answer: B

80. Which statement is an example of **Data Definition Language (DDL)**?

- a) SELECT
- b) INSERT
- c) DELETE
- d) DROP

Answer: D

81. A team of developers has computers that run Windows 10 and Ubuntu Desktop. The developers need to connect to and query an Azure SQL database from each of their computers. The developers require code assistance features such as IntelliSense.

What should the developers use?

- a) sqlcmd
- b) Microsoft SQL Server Management Studio (SSMS)
- c) Azure Data Studio
- d) Azure Data Explorer

Answer: C

82. To complete the sentence, select the appropriate option in the answer area.

Answer Area

Transparent Data Encryption (TDE) encrypts

- a column to protect data at rest and in transit.
- queries and their results in order to protect data in transit.
- the database to protect data at rest.
- the server to protect data at rest.

Answer:

Answer Area

Transparent Data Encryption (TDE) encrypts

- a column to protect data at rest and in transit.
- queries and their results in order to protect data in transit.
- the database to protect data at rest.
- the server to protect data at rest.

83. You need to ensure that users use multi-factor authentication (MFA) when connecting to an Azure SQL database. Which type of authentication should you use?

- a) service principal authentication
- b) Azure Active Directory (Azure AD) authentication
- c) SQL authentication
- d) certificate authentication

Answer: B

84. What is a benefit of hosting a database on Azure SQL managed instance as compared to an Azure SQL database?

- a) built-in high availability
- b) native support for cross-database queries and transactions
- c) system-initiated automatic backups
- d) support for encryption at rest

Answer: B

85. To complete the sentence, select the appropriate option in the answer area.

Answer Area

By default, each Azure SQL database is protected by

	▼
a network security group (NSG).	
a server-level firewall.	
Azure Firewall.	
Azure Front Door.	

Answer:

Answer Area

By default, each Azure SQL database is protected by

	▼
a network security group (NSG).	
a server-level firewall.	
Azure Firewall.	
Azure Front Door.	

86. You need to design and model a database by using a graphical tool that supports project-oriented offline database development.

What should you use?

- a) Microsoft SQL Server Data Tools (SSDT)
- b) Microsoft SQL Server Management Studio (SSMS)
- c) Azure Databricks
- d) Azure Data Studio

Answer: A

87. Match the security components to the appropriate scenarios.

Components

Authentication
Firewall
Encryption

Answer Area

	Prevent access to an Azure SQL database from another network.
	Support Azure Active Directory (Azure AD) sign-ins to an Azure SQL database.
	Ensure that sensitive data never appears as plain text in an Azure SQL database.

Answer:

Components

Authentication
Firewall
Encryption

Answer Area

Firewall	Prevent access to an Azure SQL database from another network.
Authentication	Support Azure Active Directory (Azure AD) sign-ins to an Azure SQL database.
Encryption	Ensure that sensitive data never appears as plain text in an Azure SQL database.

88. You have a transactional application that stores data in an Azure SQL managed instance. When should you implement a read-only database replica?

- a) You need to generate reports without affecting the transactional workload.
- b) You need to audit the transactional application.
- c) You need to implement high availability in the event of a regional outage.
- d) You need to improve the recovery point objective (RPO).

Answer: A

88. A relational database must be used when _____

- a) A dynamic schema is required
- b) Data will be stored as key/value pairs
- c) Storing large images and videos
- d) Strong consistency guarantees are required

Answer: D

89. Relational data uses _____ to enforce relationships between different tables.

- a) Collections
- b) Columns
- c) Keys
- d) Partitions

Answer: C

90. _____ is a virtual table that contains content defined by a query.

- a) A heap
- b) A stored procedure
- c) A view
- d) An index

Answer: C

91. You need to query a table named Products in an Azure SQL database.

Which three requirements must be met to query the table from the internet? Each correct answer presents part of the solution.

- a) You must be assigned the Reader role for the resource group that contains the database.
- b) You must have SELECT access to the Products table.
- c) You must have a user in the database.
- d) You must be assigned the Contributor role for the resource group that contains the database.

- e) Your IP address must be allowed to connect to the database.

Answer: BCE

92. Which clause should you use in a SELECT statement to combine rows in one table with rows in another table?

- a) SET
- b) VALUES
- c) KEY
- d) JOIN

Answer: D

93. Your company needs to ensure that an Azure virtual machine can connect to Azure SQL databases without exposing the databases to the internet.

What should you use?

- a) Azure Application Gateway
- b) Azure Traffic Manager
- c) Azure DNS
- d) Azure Private Link

Answer: D

94. DRAG DROP -

Match the Azure SQL services to the appropriate use cases.

Azure SQL services **Answer Area**

Azure SQL Database elastic pool		A serverless configuration
Azure SQL Database single database		A database that has the highest compatibility with on-premises Microsoft SQL Server
Azure SQL Managed instance		A low-cost, low-maintenance database

Answer:

Azure SQL services **Answer Area**

Azure SQL Database elastic pool	Azure SQL Database single database	A serverless configuration
Azure SQL Database single database	Azure SQL Managed instance	A database that has the highest compatibility with on-premises Microsoft SQL Server
Azure SQL Managed instance	Azure SQL Database elastic pool	A low-cost, low-maintenance database

95. Which **T-SQL statement** should be used to instruct a database management system to use an index instead of performing a full table scan?

- a) SELECT
- b) WHERE
- c) JOIN

Answer: A

96. _____ is a platform as a service (PaaS) relational data service that uses massively parallel processing (MPP).

- a) Azure SQL Database
- b) Azure Synapse Analytics
- c) Azure Database for MariaDB
- d) SQL Server on Azure virtual machines

Answer: B

97. _____ physically sorts the data in a table based on the values in a specified column.

- a) A view
- b) A clustered index
- c) A stored procedure
- d) A nonclustered index

Answer: B

98. In a relational database, the _____ uniquely identifies each row in a table

- a) Foreign key
- b) Primary key
- c) WHERE clause
- d) Nonclustered index

Answer: B

99. Which Azure service provides the highest compatibility for databases migrated from **Microsoft SQL Server 2019** Enterprise edition?

- a) Azure SQL Database
- b) Azure Database for MySQL
- c) Azure SQL Managed Instance
- d) an Azure SQL Database elastic pool

Answer: C

100. Which setting can only be configured **during the creation of an Azure Cosmos DB account**?

- a) geo-redundancy
- b) multi-region writes

- c) production or non-production account type
- d) API

Answer: D

101. Match the types of data stores to the appropriate scenarios.

Data Store Types	Answer Area	
Graph		A list of application user names and, for each, the default language
Object		A collection of medical images and their associated metadata.
Key/value		Employee data that shows the relationships between employees

Answer:

Data Store Types	Answer Area	
Graph	Key/value	A list of application user names and, for each, the default language
Object	Object	A collection of medical images and their associated metadata.
Key/value	Graph	Employee data that shows the relationships between employees

102. You have an Azure Cosmos DB account that uses the **Core (SQL) API**.

Which two settings can you configure at the container level? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- a) the throughput
- b) the read region
- c) the partition key
- d) the API

Answer: AC

103. A **data engineer** is responsible for which task?

- a) Design and build analytical models
- b) Design and implement data stores for analytical workloads
- c) Explore data to identify trends
- d) Implement policies, tools and processes for backup and recovery plans

Answer: A

104. Which property of a transactional workload guarantees that each **transaction** is treated as a single unit that either succeeds completely or fails completely?

- a) Isolation
- b) Durability
- c) Consistency
- d) Atomicity

Answer: D

105. Which database transaction property ensures that transactional changes to a **database are preserved** during **unexpected operating system** restarts?

- a) Consistency
- b) Durability
- c) Isolation
- d) Atomicity

Answer: A

106. What is required to provision Azure Data Lake Storage in an Azure Storage account?

- a) Versioning must be enabled
- b) Hierarchical namespace must be enabled
- c) Hierarchical namespace must be disabled
- d) Versioning must be disabled

Answer: B

107. You have a data saved in the following format:

```
<Person Age="23">
  <FirstName>John</FirstName>
  <LastName>Smith</LastName>
  <Hobbies>
    <Hobby Type="Sports">Golf</Hobby>
    <Hobby Type="Leisure">Reading</Hobby>
    <Hobby Type="Leisure">Guitar</Hobby>
  </Hobbies>
</Person>
```

Which format was used?

- a) YAML
- b) HTML
- c) XML
- d) JSON

Answer: B

108. What is the primary purpose of a data warehouse?

- a) To provide answers to complex queries that rely on data from multiple sources
- b) To provide transformation services between source and target data stores
- c) To provide read-only storage of relational and non-relational historical data
- d) To provide storage for transactional line-of-business (LOB) applications

Answer: C

109. A team of developers has computers That run Windows 10 and Ubuntu Desktop.
The developers need to connect to and query an SQL Database from the computers. The developers require code assistance features such as intelliSense.
What should the developers use?

- a) Azure Data Studio
- b) sq1cmd
- c) Microsoft SQL Server Management Studio (SSMS)
- d) Azure Data Explorer

Answer: A