

r1)

Answer Area

Descriptive analytics tells you

what is most likely to occur in the future.
what occurred in the past.
which actions you can perform to affect outcomes.
why something occurred in the past.

what occurred in the past

2)

Answer Area

A clustered index
A FileTable
A foreign key
A stored procedure

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

clustered index

3)

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

C

4)

Answer Area

Azure SQL Database
Azure Synapse Analytics
Azure Database for MariaDB
SQL Server on Azure virtual machines

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

azure synapse analytics

5)

Answer Area

A view
A clustered index
A stored procedure
A nonclustered index

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

A clustered index

A view (una vista)

- Es un objeto virtual que almacena una consulta SQL.
- No guarda datos físicamente; solo almacena la definición de la consulta.
- No afecta el orden físico de los datos.
- Sirve para simplificar consultas o restringir acceso a columnas/filas.

A clustered index (un índice clusterizado)

- Ordena físicamente los datos de la tabla en el disco según los valores de la columna o columnas definidas en el índice.
- Por eso se dice que **la tabla está “clusterizada” según el índice**: solo puede haber un clustered index por tabla porque los datos solo pueden almacenarse de una forma física.
- Esta es la respuesta correcta a la pregunta, porque es el único que cambia el orden físico de los registros.

A stored procedure (un procedimiento almacenado)

- Es un conjunto de instrucciones SQL que se almacena en la base de datos.
- Se utiliza para automatizar tareas, como insertar datos o ejecutar cálculos complejos.

-
- No afecta la estructura ni el orden de almacenamiento de los datos.

A nonclustered index (un índice no clusterizado)

- Crea una estructura separada que apunta a las filas en la tabla según las claves del índice.
- No altera el orden físico de los datos en la tabla.
- Puedes tener varios nonclustered indexes por tabla.

6)

Answer Area

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

foreign key
primary key
WHERE clause
nonclustered index

primary key

foreign key (clave foránea)

- Es una columna o conjunto de columnas que establecen una relación con la primary key (o unique key) de otra tabla.
- Su propósito es mantener la integridad referencial: asegura que los valores en la clave foránea existan en la tabla referenciada.
- **No identifica filas de forma única;** solo enlaza tablas.

primary key (clave primaria)

- Es una columna o combinación de columnas que **identifica de manera única cada fila en una tabla.**
- No permite valores nulos ni duplicados.

- Cada tabla puede tener solo una primary key.
 - **Esta es la respuesta correcta a la pregunta.**
-

WHERE clause (cláusula WHERE)

- Se usa en consultas SQL para filtrar filas que cumplan una condición.
- No es un concepto de diseño de base de datos ni una restricción; solo filtra datos en una consulta.
- No identifica filas de forma única.

7)

Answer Area

	presents content defined by a query.
A heap	
A stored procedure	
A view	
An index	

A view

8)

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

A. Azure SQL Database

- Es un servicio PaaS (Platform as a Service) que ofrece bases de datos SQL individuales (single database) o en grupos elásticos (elastic pools).
- Compatible con SQL Server en cuanto al motor básico, pero **no soporta todas las características avanzadas de SQL Server Enterprise**, como SQL Server Agent, Service Broker, cross-database transactions completas, CLR avanzado, etc.

-
- Buena opción si la aplicación puede ajustarse a una base de datos moderna con ciertas limitaciones.

B. Azure Database for MySQL

- Es un servicio gestionado para bases de datos MySQL en Azure.
 - **No es compatible con SQL Server**; es otro motor de base de datos completamente diferente (MySQL).
 - Migrar SQL Server → MySQL implicaría convertir el esquema, el código T-SQL, los procedimientos almacenados, etc., y muchas funcionalidades no se trasladarían.
-

C. Azure SQL Managed Instance

- Es un servicio PaaS que ofrece **la mayor compatibilidad con SQL Server on-premises**, incluyendo características como SQL Server Agent, Service Broker, linked servers, y soporte de bases de datos cruzadas.
 - Permite migrar casi cualquier base de datos de SQL Server 2019 Enterprise con cambios mínimos o nulos.
 - Diseñado para escenarios lift-and-shift (trasladar tal cual) y modernización gradual.
-

D. an Azure SQL Database elastic pool

- Es un grupo de bases de datos individuales (Azure SQL Databases) que comparten recursos (DTUs o vCores) para optimizar el costo si tienes muchas bases de datos pequeñas o con cargas intermitentes.
- Internamente son instancias de Azure SQL Database, **con las mismas limitaciones de compatibilidad que A**, solo que optimizadas para gestionar múltiples bases de datos.
- No añade compatibilidad extra para migrar SQL Server Enterprise.

9)

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**

10)

Data Store Types

- Graph**
- Object
- Key/value

Answer Area

- A list of application user names and, for each, the default language
- A collection of medical images and their associated metadata.
- Employee data that shows the relationships between employees

Key/Value

Object

Graph

11)

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

A. the throughput

- Throughput can be provisioned at the **database level** or the **container level**.
- If set at the container level, that container gets dedicated RU/s.

B. the read region

- Read regions are configured at the **account level** (global distribution).

C. the partition key

- The partition key is a **container-level setting** and is required for scaling and distribution.
- It is defined at container creation and cannot be changed afterward.

D. the API

- The API (Core SQL, MongoDB, Cassandra, Gremlin, Table) is chosen at the **account level**, not the container level.

12)

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

Hot Area:

Answer Area

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

<input type="checkbox"/> changes to relationships between entities
<input type="checkbox"/> geographically distributed writes
<input type="checkbox"/> transactional writes
<input type="checkbox"/> writes that have varying data structures

transactional writes

13)

Your company is designing a data store that will contain student data. The data has the following format.

StudentNumber	StudentInformation
7634634	First name: Ben Last: Smith Preferred Name: Benjamin
7634634	First Name: Dominik Last Name: Paiha Email Address: dpaiha@contoso.com MCP ID: 931817
7634636	First Name: Reshma Last Name: Patel Phone number: 514-555-1101
7634637	First Name: Yun-Feng Last Name: Peng

Which type of data store should you use?

- A. graph
 - B. key/value
 - C. object
 - D. columnar
- D. Columnar
- 14)
- Which storage solution supports role-based access control (RBAC) at the file and folder level?
- A.Azure Disk Storage
 - B.Azure Data Lake Storage**
 - C.Azure Blob storage
 - D.Azure Queue storage
- Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs). This article summarizes the basics of the access control model for Data Lake Storage Gen2.

15)

You need to store data in Azure Blob storage for seven years to meet your company's compliance requirements. The retrieval time of the data is unimportant. The solution must minimize storage costs.

Which storage tier should you use?

A.Archive

B.Hot

C.Cool

16)

Which type of non-relational data store supports a flexible schema, stores data as JSON files, and stores all the data for an entity in the same document?

A.document

B.columnar

C.graph

D.time series

17)

DRAG DROP -

Match the Azure Cosmos DB APIs to the appropriate data structures.

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

NOTE: Each correct match is worth one point.

Select and Place:

APIs	Answer Area
Cassandra API	Graph data
Gremlin API	JSON documents
MongoDB API	Key/value data
Table API	

Gremlin

MongoDB

Table

18)

HOTSPOT -

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

Hot Area:

Answer Area

To configure an Azure Storage account to support both security at the folder level and atomic directory manipulation,

- enable the hierarchical namespace.
- set Account kind to BlobStorage.
- set Performance to Premium.
- set Replication to Read-access geo-redundant storage (RA-GRS).

enable the hierachival namespace

19)

HOTSPOT -

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

Hot Area:

Answer Area

You can query a graph database in Azure Cosmos DB

- as a JSON document by using a SQL-like language.
- as a partitioned row store by using Cassandra Query Language (CQL).
- as a partitioned row store by using Language-Integrated Query (LINQ).
- as nodes and edges by using the Gremlin language.

as nodes and edges by using the Gremlin language

20)

When provisioning an Azure Cosmos DB account, which feature provides redundancy within an Azure region?

A.multi-master replication

B.Availability Zones

C.the strong consistency level

D.automatic failover

21)

What is a benefit of the Azure Cosmos DB Table API as compared to Azure Table storage?

A.provides resiliency if an Azure region fails

B.supports partitioning

C.provides a higher storage capacity

D.supports a multi-master model

22)

Your company needs to design a database that shows how changes in network traffic in one area of a network affect network traffic in other areas of the network.

Which type of data store should you use?

A.graph

B.key/value

C.document

D.columnar

Graph: Taking about relationship between one area with the other, so it makes sense that it's Graph

23)

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:

Answer Area

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"/>

YES

YES

YES

24)

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:

Answer Area

Statements	Yes	No
Azure Databricks can consume data from Azure SQL Database	<input type="radio"/>	<input type="radio"/>
Azure Databricks can consume data from Azure Event Hubs	<input type="radio"/>	<input type="radio"/>
Azure Databricks can consume data from Azure Cosmos DB	<input type="radio"/>	<input type="radio"/>

YES

YES

YES

25)

DRAG DROP -

Match the datastore services to the appropriate descriptions.

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

NOTE: Each correct match is worth one point.

Select and Place:

Services	Answer Area
Azure Blob storage	Service
Azure Cosmos DB	Service
Azure Files	
Azure Table storage	

cosmos db
files

26)

HOTSPOT -

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

Hot Area:

Answer Area

When provisioning an Azure Cosmos DB  , you need to specify which type of API you will use.

account
container
database
item

Show An

acc

27)

You need to store data by using Azure Table storage.

What should you create first?

A.an Azure Cosmos DB instance

B.a storage account

C.a blob container

D.a table

28)

You need to recommend a data store service that meets the following requirements:

⇒ Native SQL API access

⇒ Configurable indexes

What should you recommend?

A.Azure Files

B.Azure Blob storage

C.Azure Table storage

D.Azure Cosmos DB

29)

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:

Answer Area

Statements	Yes	No
Azure Table storage within a single Azure Storage account supports multiple concurrent reads in different Azure regions.	<input type="radio"/>	<input type="radio"/>
Azure Table storage within a single Azure Storage account supports multiple concurrent writes in different Azure regions.	<input type="radio"/>	<input type="radio"/>
An Azure Cosmos DB account that uses the Table API supports multiple concurrent reads in different Azure regions.	<input type="radio"/>	<input type="radio"/>
An Azure Cosmos DB account that uses the Table API supports multiple concurrent writes in different Azure regions.	<input type="radio"/>	<input type="radio"/>

YES

NO

YES

YES

30)

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

Hot Area:

Answer Area

To configure an Azure Storage account to support access control lists
that have object-level permissions,

- enable the hierarchical namespace.
- set Account kind to BlobStorage.
- set Performance to Premium.
- set Replication to Read-access geo-redundant storage (RA-GRS).

enable the hierarchical namespace

31)

Your company needs to design a database that illustrates the relationships between utilization levels of individual network devices across a local area network.

Which type of data store should you use?

A.graph

B.key/value

C.document

D.columnar

relationship = graph

32)

You manage an application that stores data in a shared folder on a Windows server.

You need to move the shared folder to Azure Storage.

Which type of Azure Storage should you use?

A.queue

B.blob

C.file

D.table

33)

Your company is designing a database that will contain session data for a website. The data will include notifications, personalization attributes, and products that are added to a shopping cart.

Which type of data store will provide the lowest latency to retrieve the data?

A.key/value

B.graph

C.columnar

D.document

34)

Your company plans to load data from a customer relationship management (CRM) system to a data warehouse by using an extract, load, and transform (ELT) process.

Where does data processing occur for each stage of the ELT process? To answer, drag the appropriate locations to the correct stages. Each location 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:

Locations

- An in-memory data integration tool
- The CRM system
- The data warehouse

Answer Area

Extract:

Location

Load:

Location

Transform:

Location

CRM
DW
DW

35)

You have an application that runs on Windows and requires access to a mapped drive.
Which Azure service should you use?

A.Azure Files

- B.Azure Blob storage
- C.Azure Cosmos DB
- D.Azure Table storage

36)

Answer Area

Statements	Yes	No
The Azure Cosmos DB API is configured separately for each database in an Azure Cosmos DB account.	<input type="radio"/>	<input type="radio"/>
Partition keys are used in Azure Cosmos DB to optimize queries.	<input type="radio"/>	<input type="radio"/>
Items contained in the same Azure Cosmos DB logical partition can have different partition keys.	<input type="radio"/>	<input type="radio"/>

NO #
YES
NO

Only one API for one account, not for the database. You cannot have different API in one Azure Cosmos DB account

37)

Your company is designing an application that will write a high volume of JSON data and will have an application-defined schema.
Which type of data store should you use?

- A.columnar
- B.key/value
- C.document
- D.graph

38)

You need to recommend a non-relational data store that is optimized for storing and retrieving text files, videos, audio streams, and virtual disk images. The data store must store data, some metadata, and a unique ID for each file.

Which type of data store should you recommend?

- A.key/value
- B.columnar
- C.object**
- D.document

39)

Your company is designing a data store for internet-connected temperature sensors.

The collected data will be used to analyze temperature trends.

Which type of data store should you use?

- A.relational
- B.time series**
- C.graph
- D.columnar

40)

Answer Area

Statements	Yes	No
Copying data to Azure Data Lake Storage from another Azure region results in extra cost.	<input type="radio"/>	<input type="radio"/>
You can use blob, table, and file storage in the same Azure Storage account.	<input type="radio"/>	<input type="radio"/>
You implement Azure Data Lake Storage by creating an Azure Storage account.	<input type="radio"/>	<input type="radio"/>

YES

YES

YES

41)

HOTSPOT -

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

Hot Area:

Answer Area

When using the Azure Cosmos DB Gremlin API, the container resource type is projected as a

graph.	▼
table.	
partition key.	
document.	

graph

42)

At which two levels can you set the throughput for an Azure Cosmos DB account? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A.database

B.item

C.container

D.partition

43)

Answer Area

Statements	Yes	No
Azure Table storage supports multiple read replicas.	<input type="radio"/>	<input type="radio"/>
Azure Table storage supports multiple write regions.	<input type="radio"/>	<input type="radio"/>
The Azure Cosmos DB Table API supports multiple read replicas.	<input type="radio"/>	<input type="radio"/>
The Azure Cosmos DB Table API supports multiple write regions.	<input type="radio"/>	<input type="radio"/>

YES

NO

YES
YES

44)

What is a characteristic of non-relational data?

- A.no indexes
- B.self-describing entities**
- C.a well-defined schema
- D.no unique key values

45)

Answer Area

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

	▼	analytics.
cognitive		
descriptive		
predictive		
prescriptive		

a. cognitive

Incorrect. Cognitive analytics involves simulating human thought processes, often using AI and machine learning, and is not relevant to a simple comparison of current versus maximum capacity.

b. descriptive

Correct. Descriptive analytics summarizes and displays data about what is currently happening or has happened in the past. In this case, the visualization shows the current student enrollment compared to the maximum capacity, describing the current status.

c. predictive

Incorrect. Predictive analytics would forecast future enrollment based on historical data, which is not what this visualization does.

d. prescriptive

Incorrect. Prescriptive analytics would suggest actions to optimize outcomes, such as strategies to increase enrollment, rather than just displaying current data.

46)

Hot Area:

Answer Area

A hierarchical namespace
Azure Synapse Link
PolyBase
The Data Movement Service (DMS)

is an Azure Synapse Analytics feature that retrieves data from Azure Blob storage by using Transact-SQL queries.

Polybase

47)

You need to gather real-time telemetry data from a mobile application.

Which type of workload describes this scenario?

- A.Online Transaction Processing (OLTP) (30secs)
- B.batch
- C.massively parallel processing (MPP)
- D.streaming (real time)**

48)

You have a dedicated SQL pool in Azure Synapse Analytics that is only used actively every night for eight hours.

You need to minimize the cost of the dedicated SQL pool as much as possible during idle times. The solution must ensure that the data remains intact.

What should you do on the dedicated SQL pool?

- A.Scale down the data warehouse units (DWUs).
- B.Pause the pool.**
- C.Create a user-defined restore point.
- D.Delete the pool

49)

Which Azure Data Factory component initiates the execution of a pipeline?

- A.a control flow
- B.a trigger**
- C.a parameter
- D.an activity

50)

Your company has a reporting solution that has paginated reports. The reports query a dimensional model in a data warehouse.

Which type of processing does the reporting solution use?

- A.stream processing
- B.batch processing
- C.Online Analytical Processing (OLAP)**
- D.Online Transaction Processing (OLTP)

51)

Match the types of activities to the appropriate Azure Data Factory activities.

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

NOTE: Each correct match is worth one point.

Select and Place:

Activity Types	Answer Area
Control	<input type="text"/>
Data movement	<input type="text"/>
Data transformation	<input type="text"/>

Copy
Mapping data flow
Lookup

movement

transformation

control

Mapping data flows are visually designed data transformations in Azure Data Factory. Data flows allow data engineers to develop data transformation logic without writing code. The resulting data flows are executed as activities within Azure Data Factory pipelines that use scaled-out Apache Spark clusters.

52)

What are three characteristics of an Online Transaction Processing (OLTP) workload? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A.denormalized data
- B.heavy writes and moderate reads**

C.light writes and heavy reads

D.schema on write

E.schema on read

F.normalized data

53)

Which two activities can be performed entirely by using the Microsoft Power BI service without relying on Power BI Desktop? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A.report and dashboard creation

B.report sharing and distribution

C.data modeling

D.data acquisition and preparation

54)

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

Hot Area:

Answer Area

In Azure Data Factory, you can use

	▼
a control flow	
a dataset	
a linked service	
an integration runtime	

to orchestrate pipeline

activities that depend on the output of other pipeline activities.

a control flow

55)

You need to develop a solution to provide data to executives. The solution must provide an interactive graphical interface, depict various key performance indicators, and support data exploration by using drill down.

What should you use in Microsoft Power BI?

A.a view

B.a report

C.a dataflow

D.Microsoft Power Apps

56)

DRAG DROP -

Match the types of visualizations to the appropriate descriptions.

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

NOTE: Each correct match is worth one point.

Select and Place:

Visualizations	Answer Area
Key influencer	Visualization A chart that displays the major contributors of a selected result or value.
Scatter	Visualization A chart that shows the relationship between two numerical values.
Treemap	Visualization A chart of colored, nested rectangles that displays individual data points represented by the size and color of a relative rectangle.

Treemap : Are charts of colored rectangles, with size representing value. They can be hierarchical, with rectangles nested within the main rectangles.

Key Influencer : A key influencer chart displays the major contributors to a selected result or value.

scatter : Display relationships between 2 (scatter) or 3 (bubble) quantitative measures -- whether or not, in which order, etc.

57)

Which two Azure services can be used to provision Apache Spark clusters? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A.Azure Time Series Insights

B.Azure HDInsight

C.Azure Databricks

D.Azure Log Analytics

58)

You have a quality assurance application that reads data from a data warehouse.

Which type of processing does the application use?

A.Online Transaction Processing (OLTP)

B.batch processing

C.Online Analytical Processing (OLAP)

D.stream processing

59)

Which three objects can be added to a Microsoft Power BI dashboard? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A.a report page**
- B.a Microsoft PowerPoint slide
- C.a visualization from a report**
- D.a dataflow
- E.a text box**

60)

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:

Answer Area

Statements	Yes	No
A Microsoft Power BI dashboard is associated with a single workspace.	<input type="radio"/>	<input type="radio"/>
A Microsoft Power BI dashboard can only display visualizations from a single dataset.	<input type="radio"/>	<input type="radio"/>
A Microsoft Power BI dashboard can display visualizations from a Microsoft Excel workbook.	<input type="radio"/>	<input type="radio"/>

YES

NO

YES

61)

Which Azure Data Factory component provides the compute environment for activities?

- A.SSIS packages
- B.an integration runtime**
- C.a control flow
- D.a pipeline

62)

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

Hot Area:

Answer Area

A Microsoft Power BI	<input type="button" value="▼"/> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>dashboard</td></tr> <tr><td>interactive report</td></tr> <tr><td>paginated report</td></tr> <tr><td>subscription</td></tr> </table>	dashboard	interactive report	paginated report	subscription	enables users to create highly formatted, fixed-layout documents optimized for printing and archiving.
dashboard						
interactive report						
paginated report						
subscription						

paginated report

63)

What are two uses of data visualization? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A.Represent trends and patterns over time

B.Implement machine learning to predict future values

C.Communicate the significance of data

D.Enforce business logic across reports

64)

You need to use Transact-SQL to query files in Azure Data Lake Storage Gen 2 from an Azure Synapse Analytics data warehouse.

What should you use to query the files?

A.Azure Functions

B.Microsoft SQL Server Integration Services (SSIS)

C.PolyBase

D.Azure Data Factory

65)

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:

Answer Area

Statements	Yes	No
You can copy a dashboard between Microsoft Power BI workspaces.	<input type="radio"/>	<input type="radio"/>
A Microsoft Power BI dashboard can only display visualizations from a single dataset.	<input type="radio"/>	<input type="radio"/>
A Microsoft Power BI dashboard can display visualizations from a Microsoft Excel workbook.	<input type="radio"/>	<input type="radio"/>

NO

NO

YES

66)

What are three characteristics of an Online Transaction Processing (OLTP) workload? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A.denormalized data

B.heavy writes and moderate reads

C.light writes and heavy reads

D.schema defined in a database

E.schema defined when reading unstructured data from a database

F.normalized data

67)

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)

68)

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

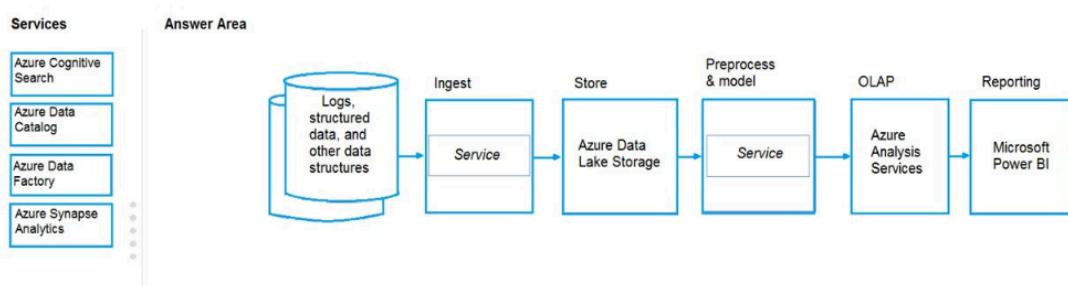
69)

Match the Azure services to the appropriate locations in the architecture.

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

NOTE: Each correct match is worth one point.

Select and Place:



azure data factory

synapse analytics

70)

Match the types of workloads to the appropriate scenarios.

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

NOTE: Each correct match is worth one point.

Select and Place:

Workload Types	Answer Area
Batch	Workload type Analyzing historical data containing web traffic collected during the previous year.
Streaming	Workload type Classifying images that were uploaded last month.
	Workload type Tracking in real time how many people are currently using a website.

Batch

Batch

Streaming

71)

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

Hot Area:

Answer Area

In a data warehousing workload, data

from a single source is distributed to multiple locations
from multiple sources is combined in a single location
is added to a queue for multiple systems to process
is used to train machine learning models

from multiple sources is combined in a single location

72)

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:

Answer Area

Statements	Yes	No
A pipeline is a representation of a data structure within Azure Data Factory	<input type="radio"/>	<input type="radio"/>
Azure Data Factory pipelines can execute other pipelines	<input type="radio"/>	<input type="radio"/>
A processing step within an Azure Data Factory pipeline is an activity	<input type="radio"/>	<input type="radio"/>

NO

YES

YES

A pipeline is a representation of a data structure within Azure Data Factory → No

- A pipeline in ADF is a logical grouping of activities, not a data structure.

Azure Data Factory pipelines can execute other pipelines → Yes

- ADF supports calling one pipeline from another using the **Execute Pipeline** activity.

A processing step within an Azure Data Factory pipeline is an activity → Yes

- Activities in ADF represent individual processing steps within a pipeline.

73)

Match the Azure services to the appropriate requirements.

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

NOTE: Each correct match is worth one point.

Select and Place:

Services	Answer Area	
Azure Data Lake Storage	Service	Output data to Parquet format
Azure SQL Database	Service	Store data that is in Parquet format
Azure Synapse Analytics	Service	Persist a tabular representation of data that is stored in Parquet format

Synapse

Data Lake Storage

SQL Database

74)

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:

Answer Area

Statements	Yes	No
Azure Synapse Analytics scales storage and compute independently	<input type="radio"/>	<input type="radio"/>
Azure Synapse Analytics can be paused to reduce compute costs	<input type="radio"/>	<input type="radio"/>
An Azure Synapse Analytics data warehouse has a fixed storage capacity	<input type="radio"/>	<input type="radio"/>

YES

YES
NO

75)

What should you use to build a Microsoft Power BI paginated report?

- A.Charticulator
- B.Power BI Desktop
- C.the Power BI service
- D.Power BI Report Builder**

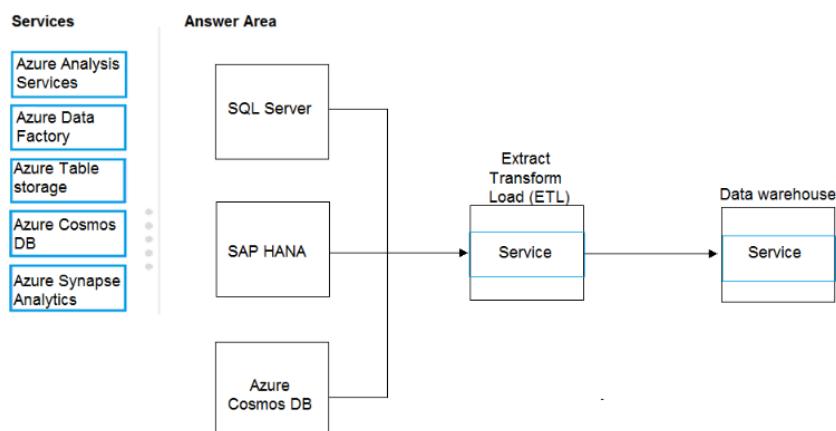
76)

Match the Azure services to the appropriate locations in the architecture.

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

NOTE: Each correct match is worth one point.

Select and Place:



Data Factory
Synapse analytics

77)

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:

Answer Area		Statements	Yes	No
		Azure Databricks is an Apache Spark-based analytics platform.	<input type="radio"/>	<input type="radio"/>
		Azure Analysis Services is used for transactional workloads.	<input type="radio"/>	<input type="radio"/>
		Azure Data Factory orchestrates data integration workflows.	<input type="radio"/>	<input type="radio"/>

YES

NO
YES

78)

Hot Area:

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 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"/>

YES

NO

NO

79)

Which scenario is an example of a streaming workload?

- A.sending transactions that are older than a month to an archive
- B.sending transactions daily from point of sale (POS) devices
- C.sending telemetry data from edge devices**
- D.sending cloud infrastructure metadata every 30 minutes

80)

Answer Area

Batch workloads	<input checked="" type="checkbox"/>
process data in memory, row-by-row.	<input type="checkbox"/>
collect and process data at most once a day.	<input type="checkbox"/>
process data as new data is received in near real-time.	<input type="checkbox"/>
collect data and then process the data when a condition is met.	<input type="checkbox"/>

collect data and then process the data when a condition is met

81)

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:

Answer Area

Statements	Yes	No
Processing salary payments once a month is an example of a batch workload.	<input type="radio"/>	<input type="radio"/>
A wind turbine that sends 50 sensor readings per second is an example of a streaming workload.	<input type="radio"/>	<input type="radio"/>
A home electricity meter that sends readings once a day to an energy provider is an example of a streaming workload.	<input type="radio"/>	<input type="radio"/>

YES

YES

NO

82)

A bar chart showing year-to-date sales by region is an example of which type of analytics?

- A.predictive
- B.prescriptive
- C.descriptive
- D.diagnostic

83)

Answer Area

Statements	Yes	No
Stream processing has access to the most recent data received or data within a rolling time window.	<input type="radio"/>	<input type="radio"/>
Batch processing must occur immediately and have latency in the order of seconds or milliseconds.	<input type="radio"/>	<input type="radio"/>
Stream processing is used for simple response functions, aggregates, or calculations such as rolling averages.	<input type="radio"/>	<input type="radio"/>

YES

NO

YES

84)

You need to perform hybrid transactional and analytical processing (HTAP) queries against Azure Cosmos DB data sources by using Azure Synapse Analytics.
What should you use?

- A.Synapse pipelines
- B.a Synapse SQL pool
- C.Synapse Link**
- D.Synapse Studio

85)

You need to create a visualization of running sales totals per quarter as shown in the following exhibit.



What should you create in Power BI Desktop?

- A. a waterfall chart
- B. a ribbon chart
- C. a bar chart
- D. a decomposition tree

waterfall chart

86)

You have the following two tables of customer data.

CustomerID	NameStyle	Title	FirstName	MiddleName	LastName
29486	0	Ms.	Kim	NULL	Abercrombie
29489	0	Ms.	Frances	B.	Adams
29490	0	Ms.	Margaret	J.	Smith
29492	0	Mr.	Jay	NULL	Adams

CustomerID	AddressID	AddressType	ModifiedDate
29486	621	Main Office	9/1/05 0:00
29489	1069	Main Office	7/1/05 0:00
29490	887	Main Office	9/1/06 0:00
29492	618	Main Office	12/1/06 0:00
29494	537	Main Office	9/1/05 0:00

Which type of data do the tables contain?

- A. structured
- B. non-relational
- C. semi-structured
- D. unstructured

Structured

87)

Answer Area

You can query a graph database in Azure Cosmos DB

- | |
|--|
| as nodes and edges by using the Gremlin language |
| as partitioned row store by using Cassandra Query Language (CQL) |
| as partitioned row store by using Language-Integrated Query (LINQ) |

as nodes and edges by using the gremlin language

88)

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

- A.REVOKE
- B.DISABLE
- C.INSERT**
- D.GRANT

89)

Which Azure Blob Storage feature enables you to sync a Blob Storage account to an external cache?

- A.the Hot access tier
- B.change feed**
- C.snapshots
- D.versioning

The feature in Azure Blob Storage that enables you to sync a Blob Storage account to an external cache is called "Azure Blob Storage on Edge." Azure Blob Storage on Edge extends the capabilities of Azure Blob Storage by providing a distributed caching solution that enables you to replicate blobs from a centralized Blob Storage account to edge locations closer to your applications or end-users.

'Azure Blob Storage on Edge' uses Azure Blob Storage's "change feed" functionality to detect changes to blobs in the centralized Blob Storage account and replicate those changes to the edge cache.

90)

You have an on-premises Microsoft SQL Server database.

You need to migrate the database to the cloud. The solution must meet the following requirements:

- * Minimize maintenance effort.
- * Support the Database Mail and Service Broker features.

What should you include in the solution?

- A.Azure SQL Database single database
- B.an Azure SQL Database elastic pool
- C.Azure SQL Managed instance**
- D.SQL Server on Azure virtual machines

91)

Which two features distinguish Delta Lake from Azure Data Lake Storage? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A.support for batch data
 - B.schema enforcement**
 - C.support for an Apache Spark runtime
 - D.transactional consistency**
 - E.support for streaming data
- Delta Lake = ACID Transactions, Schema enforcement , history/lineage etc

92)

What is a function of a modern data warehouse?

- A.supports batch processing only
- B.supports real-time and batch processing**
- C.provides built-in or native online analytical processing
- D.stores raw data only

93)

HOTSPOT -

Select the answer that correctly completes the sentence.

Hot Area:

Answer Area

An Azure Storage account must have enabled to support Azure Data Lake Storage.

- Blob soft delete
- Hierarchical namespace
- Large file shares
- Versioning

Hierarchical namespace

94)

What can be used with native notebook support to query and visualize data by using a web-based interface?

- A.Azure Databricks
- B.pgAdmin
- C.Microsoft Power BI

95)

You have data saved in the following format.

```
{  
    "firstname": "John",  
    "lastName": "Doe",  
    "age": "23",  
    "hobbies": [  
        { "type": "Sports", "value": "Golf" },  
        { "type": "Leisure", "value": "Reading" },  
        { "type": "Leisure", "value": "Guitar" }  
    ]  
}
```

Which format was used?

- A. XML
- B. HTML
- C. YAML
- D. JSON

JSON

96)

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

97)

You have 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. JSON
- B. YAML
- C. HTML
- D. XML

XML

98)

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

- A.consistency
- B.atomicity
- C.durability**
- D.isolation

Durability: After a transaction successfully completes, changes to data persist and are not undone, even in the event of a system failure.

99)

Which database transaction property ensures that individual transactions are executed only once and either succeed in their entirety or roll back?

- A.atomicity**
- B.durability
- C.isolation
- D.consistency

An atomic transaction is an indivisible and irreducible series of database operations such that either all occurs, or nothing occurs. A guarantee of atomicity prevents updates to the

database occurring only partially, which can cause greater problems than rejecting the whole series outright. As a consequence, the transaction cannot be observed to be in progress by another database client.

100)

Answer Area

A clustered index
A FileTable
A foreign key
A stored procedure

is an object associated with a table that sorts on their key values.

clustered index

101)

Which Azure Storage service implements the key/value model?

- A.Azure Queue
- B.Azure Files
- C.Azure Table
- D.Azure Blob

102)

Hot Area:

Answer Area

Social media users and followers in a graph database is an example of

semi-structured data.
structured data.
unstructured data.

Semi Structured

Semi-structured data is data that does not conform to a strict relational model but still has some organizational structure, often through key-value pairs or graph nodes and edges. In a graph database, relationships between social media users and their followers are represented as edges connecting different nodes (users), providing a form of structure but not as rigid as in traditional relational databases.

103)

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:

Answer Area

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"/>

No

Explanation: Normalization is about organizing data to reduce redundancy and improve data integrity. It does not eliminate relationships but instead structures tables to ensure relationships are properly maintained, typically using foreign keys.

Normalizing a database reduces data redundancy:

Yes

Explanation: The primary goal of normalization is to reduce or eliminate data redundancy. By organizing data into multiple related tables, the same piece of data is stored only once.

Normalization improves data integrity:

Yes

Explanation: Normalization improves data integrity by ensuring that data is stored logically and consistently. It prevents anomalies and ensures that updates, deletions, or inserts do not compromise the quality of the data.

104)

Answer Area

A key/value data store is optimized for

enforcing constraints
simple lookups
table joins
transactions

simple lookups

105)

You plan to deploy an app. The app requires a nonrelational data service that will provide latency guarantees of less than 10-ms for reads and writes.

What should you include in the solution?

A.Azure Blob storage

- B.Azure Files
- C.Azure Table storage
- D.Azure Cosmos DB

106)

Answer Area

A non-relational database

imposes a fixed schema on data
store entities without a unique key value
stores data in relational tables
stores data without a fixed schema

stored data without a fixed schema

107)

Hot Area:

Answer Area

Statements	Yes	No
In a transactional database that guarantees atomicity, all statements in a transaction must complete successfully or the transaction must roll back.	<input type="radio"/>	<input type="radio"/>
In a transactional database that guarantees consistency, all data changes will be logged and accounted for.	<input type="radio"/>	<input type="radio"/>
In a transactional database that guarantees isolation, processes can see only data in a consistent state.	<input type="radio"/>	<input type="radio"/>

YES
NO
YES

108)

You have data saved in the following format.

```
FirstName, LastName, Age, LeisureHobby, SportsHobby  
John, Smith, 23, Reading, Backteball  
Ben, Smith, 21, Guitar Curling
```

Which format was used?

- A. YAML
- B. CSV
- C. JSON
- D. HTML

CSV

109)

Answer Area

	▼
A data analyst	
A data engineer	
A data scientist	
A database administrator	

is responsible for managing the security of the data in a database.

db admin

110)

Answer Area

Backing up and restoring data are the responsibilities of a

	▼
data analyst	
data engineer	
data scientist	
database administrator	

db admin

111)

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

- A.Versioning must be disabled.
- B.Hierarchical namespace must be disabled.
- C.Versioning must be enabled.
- D.Hierarchical namespace must be enabled.

112)

Answer Area

Microsoft SQL Server database tables store

non-relational data.	▼
relational data.	▼
semi-structured data.	▼

relational data

113)

Answer Area

▼	An Azure SQL Database elastic pool
▼	An instance of SQL Server on Azure Virtual Machines
▼	A single database in Azure SQL Database

can be used as part of a lift-and-shift solution for migrating an on-premises application to the cloud with minimal changes.

an instance of sql server on azure vm

114)

Answer Area

In Microsoft Power BI, a

▼	dashboard
▼	dataset
▼	report
▼	tile

is a collection of visualizations that appear together on one or more pages.

report

115)

Match the types of data to the appropriate Azure data services.

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

NOTE: Each correct match is worth one point.

Select and Place:

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

Image Files

Relationships between employees

key/value pairs

116)

Match the processes to the appropriate scenarios.

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

NOTE: Each correct match is worth one point.

Select and Place:

Processes	Answer Area
Data ingestion	Data is retrieved and processed before being saved to a target system
Extract, load, and transform (ELT) processing	Data is saved to a target system, and then processed
Extract, transform, and load (ETL) processing	Data is extracted from a source system, and then saved to a target system

ETL

ELT

Data ingestion

117)

What is used to define a query in a stream processing jobs in Azure Stream Analytics?

A.YAML

B.KQL

C.SQL

D.XML

118)

Hot Area:

An Azure SQL server
An elastic pool
The Data Migration Assistant (DMA)
A virtual network

enables multiple Azure SQL databases to share resources such as memory, data storage space, and processing power.

an elastic pool

119)

Select the answer that correctly completes the sentence.

Hot Area:

XML-formatted files are examples of

relational data.
semi-structured data.
unstructured data.

XML, CSV, JSON - Semi-structured data.

120)

In a fully normalized database, how is data read and written for a single entity?

A.Data is read from multiple tables and written to multiple tables.

B.Data is read from a single table and written to a single table.

C.Data is read from a single table and written to multiple tables.

D.Data is read from multiple tables and written to a single table.

A. Data is read from multiple tables and written to multiple tables.

Explanation:

- In a **fully normalized database** (e.g., 3NF or higher):

- Data is broken into multiple related tables to reduce redundancy.
- **Reading** a single entity typically requires joining multiple tables to reconstruct all the information.
- **Writing** (inserting/updating) often involves modifying multiple tables because the data is distributed across them.

121)

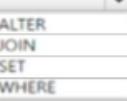
What is a primary characteristic of a relational database?

- A.a flexible data structure
- B.data is queried and manipulated by using a variant of the SQL language**
- C.a lack of dependencies between tables
- D.a large amount of duplicate data

122)

Hot Area:

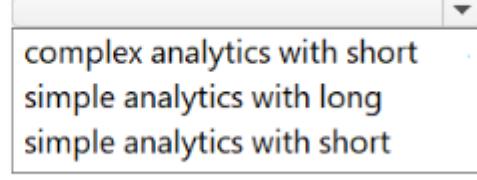
Answer Area

The  clause can be used in Data Manipulation Language (DML) statements to specify the criteria that rows must match.

Where

123)

Answer Area

Stream processing is used for  latency.

complex analytics with short
simple analytics with long
simple analytics with short

simple analytics with short

124)

What is a characteristic of a non-relational database?

- A.full support for Transact-SQL
- B.a fixed schema
- C.self-describing entities**

125)

What should you use to automatically delete blobs from Azure Blob Storage?

- A.archive storage
- B.the change feed
- C.soft delete
- D.a lifecycle management policy**

Azure Storage lifecycle management offers a rule-based policy that you can use to transition blob data to the appropriate access tiers or to expire data at the end of the data lifecycle.

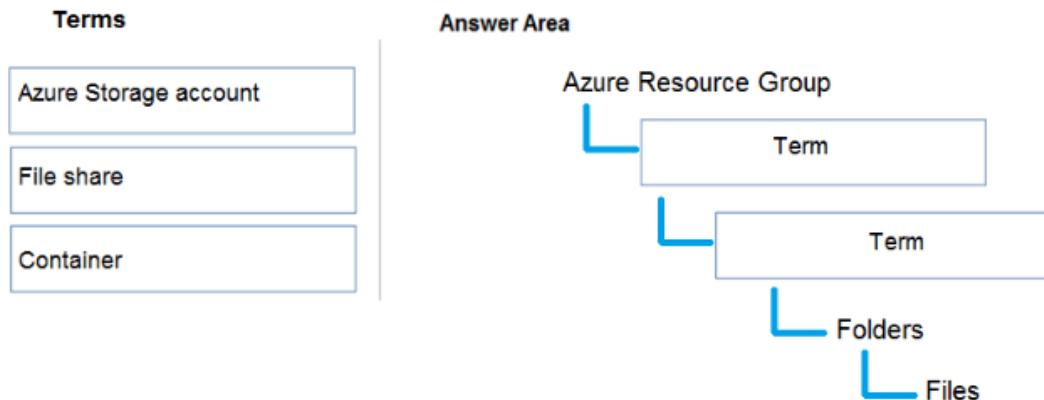
126)

Match the Azure Data Lake Storage Gen2 terms to the appropriate levels in the hierarchy.

To answer, drag the appropriate term from the column on the left to its level 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:



azure storage acc
container

127)

In Azure Table storage, each row in a table must be uniquely identified by which two components? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A.a partition key**
- B.a range
- C.a row key**
- D.a timestamp

128)

Hot Area:

Answer Area

	is responsible for creating visuals and charts that help a company make informed decisions.
	A data analyst
	A data engineer
	A data scientist
	A database administrator

data analyst

129)

You need to store event log data that is semi-structured and received as the logs occur. What should you use?

- A.Azure Table storage
- B.Azure Queue storage
- C.Azure Files

130)

Which Azure Cosmos DB API should you use for a graph database?

- A.Table
- B.Cassandra
- C.Core (SQL)
- D.Gremlin

131)

Statements	Yes	No
Azure Data Lake storage can be used as a staging area for ingested data before the data is converted into a format suitable for performing analytics.	<input type="radio"/>	<input type="radio"/>
Azure Data Factory is an analytics engine that uses a massively parallel processing (MPP) architecture.	<input type="radio"/>	<input type="radio"/>
Azure HDInsight enables you to build tabular models from multiple data sources to support online analytical processing (OLAP) queries.	<input type="radio"/>	<input checked="" type="radio"/>

YES

NO

NO

Y - Azure Data Lake Storage can be used as a staging area for ingested data before the data is converted into a format suitable for performing analytics. It allows you to store and analyze large amounts of data, and it is optimized for big data analytics workloads.

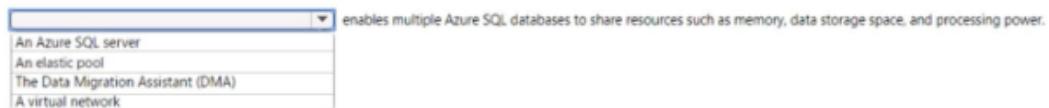
N - Azure Data Factory is a cloud-based data integration service that allows you to create, schedule, and manage data pipelines. It does not use a massively parallel processing architecture by default, but allows you to perform complex data integration and transformation tasks by integrating with other Azure services.

N - Azure HDInsight is designed for big data analytics workloads and does not enable you to build tabular models from multiple data sources to support OLAP queries. Azure Analysis Services is a service that you can use to create and manage tabular models for OLAP.

132)

Hot Area:

Answer Area



elastic pool

133)

A bank has a system that manages financial transactions.

When transferring money between accounts, the system must never retrieve a value for the source account that reflects the balance before the transfer and a value for the destination account that reflects the balance after the transfer.

Of which ACID semantic is this an example?

- A.atomicity
- B.durability
- C.consistency
- D.isolation**

Isolation - when multiple users are reading and writing from the same table all at once, isolation of their transactions ensures that the concurrent transactions don't interfere with or affect one another. Each request can occur as though they were occurring one by one, even though they're actually occurring simultaneously.

134)

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.

Term	Answer Area
Data warehouses	A solution that copies data from files and online transaction processing (OLTP) databases into an analytical processing system.
Dimension tables	Contains numeric values that can be analyzed.
Extract, transform, and load (ETL)	
Fact tables	A solution that stores data in a relational schema that is optimized for read operations.
Online analytical processing (OLAP)	

ETL
Fact Tables
DW

135)

A data engineer is responsible for which task?

- A.Explore data to identify trends.
- B.Implement policies, tools, and processes for backup and recovery plans.
- C.Design and build analytical models.
- D.Design and implement data stores for analytical workloads.**

136)

What are two characteristics of real-time data processing? Each correct answer presents a complete solution.

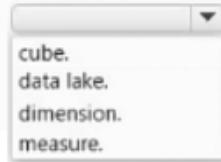
NOTE: Each correct selection is worth one point.

- A.Data is processed periodically
- B.Low latency is expected**
- C.High latency is acceptable
- D.Data is processed as it is created**

137)

Answer Area

Data in a data warehouse can be aggregated and loaded into an online analytical processing (OLAP) model, which is also known as a



cube

En un **data warehouse**, un **cube** (**cubo OLAP**) es una estructura multidimensional utilizada para organizar y agregar datos de manera que sean fáciles y rápidos de consultar en análisis complejos.

Características principales de un cube:

- **Multidimensionalidad:**
 - Contiene **dimensiones** (ej. Tiempo, Producto, Región) y **medidas** (ej. Ventas, Ingresos).
- **Agregaciones precomputadas:**

- Permite consultas analíticas rápidas al almacenar cálculos agregados previamente.
- **Soporte para OLAP (Online Analytical Processing):**
 - Facilita operaciones como **drill-down, roll-up, slice, dice**.
- **Ejemplo:**
 - Un cube de ventas podría permitir preguntar: "*¿Cuáles fueron las ventas totales por producto y región en 2024?*" de forma instantánea.

138)

Answer Area

are used to compare two numeric measures and identify a relationship or correlation between them.

Bar charts
Pie charts
Scatter charts
Tables

Scatter Charts - A scatter chart (or scatter graph) uses dots to represent values for two different numeric variables. The position of each dot on the horizontal and vertical axis indicates values for an individual data point. Scatter plots are used to observe relationships between variables.

139)

Which file format has defined names and data types for each column and uses compressed columnar storage?

A.HTML

B.CSV

C.Apache Parquet

D.JSON

140)

Answer Area

Statements	Yes	No
Data stored in the Hot access tier of Azure Blob storage is stored on high-performance media.	<input type="radio"/>	<input type="radio"/>
The Cool access tier in Azure Blob storage incurs higher storage costs compared to the Hot access tier.	<input type="radio"/>	<input type="radio"/>
The Archive access tier in Azure Blob storage has the highest latency of the three available tiers.	<input type="radio"/>	<input type="radio"/>

YES
NO
YES

141)

Answer Area

Statements	Yes	No
Online transaction processing (OLTP) relies on a database system where data storage is optimized for both read and write operations.	<input type="radio"/>	<input type="radio"/>
Online analytical processing (OLAP) relies on a database system where data storage is optimized for both read and write operations.	<input type="radio"/>	<input type="radio"/>
Data warehouses are optimized for read operations.	<input type="radio"/>	<input type="radio"/>

YES
NO
YES

142)

A retail point of sale (POS) system is an example of which type of solution?

- A.a data warehouse
- B.online analytical processing (OLAP)
- C.extract, transform, and load (ETL)
- D.online transaction processing (OLTP)**

An online transaction processing (OLTP) system is designed to handle real-time transactional operations, such as capturing and processing sales transactions, inventory management, and customer interactions. POS systems are typically used in retail environments to facilitate the sale of products or services to customers.

143)

Select the answer that correctly completes the sentence.

Answer Area

In a graph database, edges specify relationships between

	▼
column families	
facts	
vertexes	
tables	

vertexes

A graph database is a collection of nodes (or vertices) and edges (or relationships) and nodes = vertexes

144)

Match the Azure Data Factory components to the appropriate descriptions.

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

NOTE: Each correct match is worth one point.

Select and Place:

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	

Dataset

Linked Service

Pipeline

145)

You have structured data in tabular format.

What represents an individual instance of a data entity?

A.a column

B.a table

C.a cell

D.a row

A row represents a single instance of an entity. A column defines a specific property of an entity.

146)

Answer Area

Relational databases are commonly used to store and query

blobs. semi-structured data. structured data. unstructured data.

structured

147)

Which Azure SQL offering provides near-100 percent compatibility with on-premises Microsoft SQL Server instances, while providing automated updates, backups, and maintenance tasks?

A.Azure SQL Managed Instance

B.SQL Server on Azure Virtual Machines

C.Azure SQL Database

D.Azure SQL Edge

148)

Answer Area

Relational data uses  to enforce relationships between different tables.

- collections
- rows
- keys
- partitions

keys

149)

Select the answer that correctly completes the sentence.

Answer Area

An extract load, and transform (ELT) process requires 

- a data pipeline that includes a transformation engine.
- a separate transformation engine.
- a target data store powerful enough to transform data.
- data that is fully processed before being loaded to the target data store

a target data store powerful enough to transform data

150)

Answer Area

In an analytical model designed as a star schema, the entities by which you aggregate or slice measures are called

-  cubes.
- dimensions.
- facts.
- schemas.

dimensions

Dimensions:- In a star schema, the entities by which you aggregate or slice measures are called dimensions. Dimensions are the descriptive attributes or perspectives of the data that provide the context for the measures (also known as facts) in the model.

151)

Data storage options	Answer Area
Azure Blob Storage	<input type="text"/> Audio files
Azure Cosmos DB for NoSQL	<input type="text"/> JSON documents
Azure Data Factory	<input type="text"/> Tabular datasets
Azure SQL Database	

Blob

Cosmos DB

SQL DB

152)

Answer Area

Statements	Yes	No
The Cool access tier is the default tier of an Azure Storage account.	<input type="radio"/>	<input type="radio"/>
Append blobs are optimized for random read and write operations.	<input type="radio"/>	<input type="radio"/>
Retrieving data from the Archive access tier takes hours to complete.	<input type="radio"/>	<input type="radio"/>

NO

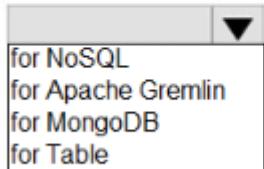
NO

YES

153)

Answer Area

The Azure Cosmos DB



API enables the use of `SELECT` statements to retrieve documents from Azure Cosmos DB.

}

No SQL

154)

Answer Area

Statements	Yes	No
You create Azure File Storage in a storage account.	<input type="radio"/>	<input type="radio"/>
The Premium tier of Azure File Storage uses HDD-based hardware in a datacenter.	<input type="radio"/>	<input type="radio"/>
The Standard tier of Azure File Storage uses SSDs.	<input type="radio"/>	<input type="radio"/>

YES

NO The Premium tier of Azure File Storage uses SSD-based hardware in a datacenter, not HDD-based

NO The Standard tier of Azure File Storage also uses HDD-based hardware in a datacenter, not SSD-based. However, it is worth noting that both tiers of Azure File Storage offer a combination of SSDs and HDDs to optimize performance and cost

155)

Match the types of workloads to the appropriate scenarios.

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

NOTE: Each correct match is worth one point.

Select and Place:

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
Batch	Workload type Updates to inventory data will be loaded to a data warehouse every 1 million transactions.

Batch

Streaming

Batch

156)

Answer Area

<input type="checkbox"/> Microsoft Power BI Desktop	provides a full range of Power BI data modeling and report editing features.
<input type="checkbox"/> The Microsoft Power BI service	
<input type="checkbox"/> The Microsoft Power BI phone app	

Desktop

157)

Answer Area

After you create Microsoft Power BI data models and reports, you can publish them to

<input type="checkbox"/> Power BI Desktop.
<input type="checkbox"/> Power Query.
<input type="checkbox"/> the Power BI phone app.
<input type="checkbox"/> the Power BI service.

service

The Power BI service is the central hub for publishing and sharing your Power BI content.

158)

Which type of Azure resource supports the serverless configuration of an Azure SQL database?

- A.SQL Server on Azure Virtual Machines
- B.an Azure SQL Database elastic pool
- C.a single database in Azure SQL Database
- D.Azure SQL Managed Instance

159)

Online analytical processing (OAP) systems are particularly suitable for analytical workloads because data is

limited in size.
optimized for transactions.
pre-aggregated.
read-only.

pre aggregated

160)

Match the data processing languages to the appropriate real-time analytics services.

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

NOTE: Each correct match is worth one point.

Language	Answer Area
JavaScript	<input type="text"/>
KQL	<input type="text"/>
Python	<input type="text"/>
SQL	<input type="text"/>

Azure Data Explorer: KQL (Kusto Query Language), which is a proprietary query language specifically designed for Azure Data Explorer. It is used to analyze and query large volumes of structured and unstructured data in real-time.

Azure Stream Analytics: SQL, which is a standard query language for relational databases. It is used to analyze and process high-velocity, real-time streaming data from various sources, such as IoT devices, social media platforms, and other real-time data streams.

Azure Synapse Analytics: SQL and Python. SQL is used to query and analyze structured data stored in Azure Synapse Analytics, while Python can be used for data preprocessing, machine learning, and other data science tasks.

161)

Which Azure Cosmos DB API should you use for a graph database?

- A.Table
- B.Cassandra
- C.NoSQL
- D.Gremlin**

162)

What is a difference between structured data and semi-structured data?

- A.Structured data has a fixed schema and semi-structured data has a flexible schema.**
- B.Only Structured data supports entities.
- C.Structured data has a flexible schema and semi-structured data has a fixed schema.
- D.Only Structured data supports attributes.

163)

Answer Area

Statement	Yes	No
Database administrators apply data cleansing routines and turn data into useful information.	<input type="radio"/>	<input type="radio"/>
Data engineers manage databases, store backup copies of data, and restore data in the event of a failure.	<input type="radio"/>	<input type="radio"/>
Data analysts create data visuals and enable companies to make data-driven decisions.	<input type="radio"/>	<input type="radio"/>

NO

NO

YES

164)

A bank needs to ensure that after an account transfer transaction completes, the revised account balances persists even if the database system hosting the transaction becomes temporarily unavailable.

Of which ACID semantic is this an example?

- A.durability**
- B.isolation
- C.atomicity
- D.consistency

165)

Your company plans to load data from a customer relationship management (CRM) system to a data warehouse by using an extract, load, and transform (ELT) process.

Where does data processing occur for each stage of the ELT process? To answer, drag the appropriate locations to the correct stages. Each location 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:

Locations	Answer Area
A standalone data analysis tool	Extract:
The CRM system	Load:
The data warehouse	Transform:

CRM

DW

DW

166)

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

- A.INSERT
- B.ALTER
- C.DROP
- D.CREATE

167)

Which language is used to define queries in Azure Synapse Data Explorer?

- A.Bash
- B.PowerShell
- C.KQL
- D.SQL

168)

Answer Area

The service is optimized for IoT solutions.

Azure SQL Database

Azure SQL Edge

Azure SQL Managed Instance

SQL Server on Azure Virtual Machines

SQL Edge

169)

Answer Area	Statement	Yes	No
	In a relational database, the schema is defined before data is written to the table.	<input type="radio"/>	<input type="radio"/>
	Key/value data stores are highly optimized for complex queries that contain multiple joins.	<input type="radio"/>	<input type="radio"/>
	A relational database is commonly used to store and query structured data.	<input type="radio"/>	<input type="radio"/>

YES

NO

YES

170)

Select the answer that correctly completes the sentence.

Answer Area

The format is used to store delimited data, separates data fields by using commas, and terminates rows by using a carriage return.

CSV

JSON

TSV

XML

CSV

171)

Select the answer that correctly completes the sentence.

Answer Area

The file format uses a hierarchical document schema to define data entities that have multiple attributes.

CSV

JSON

ORC

TSV

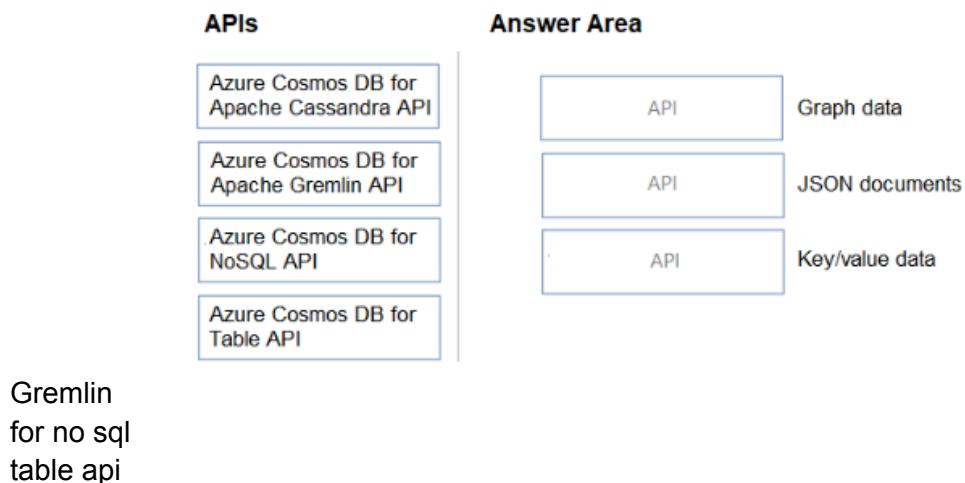
JSON

172)

Match the Azure Cosmos DB APIs to the appropriate data structures.

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

NOTE: Each correct match is worth one point.



173)

Which Azure Cosmos DB API should you use for a graph database?

- A.Azure Cosmos DB for Table
- B.Azure Cosmos DB for Apache Cassandra
- C.Azure Cosmos DB for NoSQL
- D.Azure Cosmos DB for Apache Gremlin

174)

Select the answer that correctly completes the sentence.

Answer Area

<input type="checkbox"/>

are responsible for the availability, performance, and optimization of databases.

db admin

175)

Match the cloud service model to the appropriate Azure relational database service.

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

NOTE: Each correct match is worth one point.

Cloud service model	Answer Area	
Infrastructure as a service	Cloud service model	Azure SQL Database
Platform as a service	Cloud service model	Azure SQL Managed Instance
Software as a service	Cloud service model	SQL Server on Azure Virtual Machines

paaS

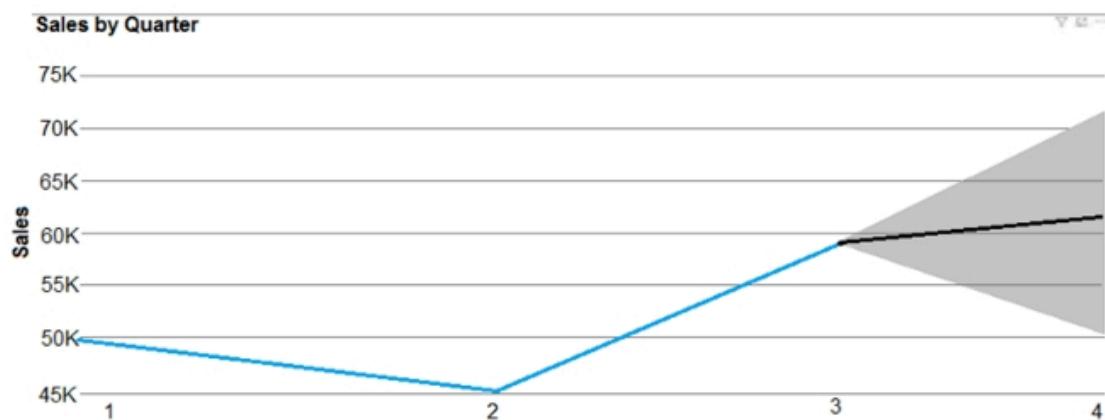
saaS

iaas

176)

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

predictive

177)

A bank needs to ensure that a transaction involving debiting funds from a source account and crediting the same funds to a destination account must complete both actions. If either action fails to complete, the other action must fail.

Of which ACID semantic is this an example?

- A.consistency
- B.durability
- C.atomicity**
- D.isolation

Atomicity guarantees that each transaction is treated as a single "unit", which either succeeds completely or fails completely: if any of the statements constituting a transaction fails to complete, the entire transaction fails and the database is left unchanged

Consistency ensures that a transaction can only bring the database from one consistent state to another, preserving database invariants: any data written to the database must be valid according to all defined rules

Isolation ensures that concurrent execution of transactions leaves the database in the same state that would have been obtained if the transactions were executed sequentially

Durability guarantees that once a transaction has been committed, it will remain committed even in the case of a system failure (e.g., power outage or crash).

178)

Blob rehydration occurs in Azure Blob storage when a blob moves between which access tiers?

- A.Hot to Cool
- B.Hot to Archive
- C.Cool to Archive
- D.Archive to Cool**

179)

Which activity is most common for transactional workloads?

- A.recording small units of work events in real time**
- B.aggregating massive amounts of data
- C.producing complex reports
- D.performing self-service data exploration

180)

You have a banking application that transfers money in to and out of accounts. Of which type of solution is this an example?

A.online transaction processing (OLTP)

B.online analytical processing (OLAP)

C.extract, transform and load (ETL)

D.a data warehouse

181)

Match the job roles to the appropriate tasks.

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

NOTE: Each correct match is worth one point.

Job roles	Answer Area
Data analyst	Job role Create a pipeline to transfer data from a database to a data warehouse.
Data architect	Job role Create a transactional database.
Data engineer	Job role Create a chart that shows sales transactions by week.
Database administrator	

engineer

db admin

analyst

182)

Job role	Answer Area
Data analyst	Job role Database backup and recovery
Data engineer	Job role Enabling advanced analytic capabilities through reports
Database administrator	Job role Monitoring data pipelines

db admin

analyst

engineer

183)

You need to accept and store large quantities of IoT streaming data.
Which database solution should you use?

- A.Azure Database for PostgreSQL
- B.Azure Database for MariaDB
- C.Azure Cache for Redis
- D.Azure Cosmos DB**

184)

Job role	Answer Area	
Data analyst	<input type="text"/>	Assign permissions to users.
Data engineer	<input type="text"/>	Derive meaning from data by creating visualizations and charts.
Database administrator	<input type="text"/>	Implement which pipelines to transfer and transform data between systems.

db admin
analyst
engineer

185)

Answer Area

A JSON document that contains customer entities with a variable number of properties is an example of

<input type="checkbox"/> relational
<input type="checkbox"/> semi-structured
<input type="checkbox"/> structured
<input type="checkbox"/> unstructured

semi structured

186)

Answer Area

<input type="checkbox"/> A data analyst
<input type="checkbox"/> A data engineer
<input type="checkbox"/> A database administrator

analyst

187)

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

- A.REVOKE
- B.DISABLE

C.CREATE

D.UPDATE

188)

SELECT, INSERT, and UPDATE are examples of which type of SQL statement?

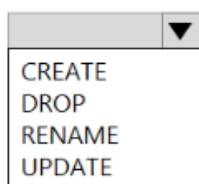
A.Data Definition Language (DDL)

B.Data Control Language (DCL)

C.Data Manipulation Language (DML)

189)

Answer Area



is an example of a Data Manipulation Language (DML) statement.

Update

190)

Answer Area

Statements

Yes

No

The pgAdmin tool can be used to manage Azure Database for PostgreSQL.

Azure Database for MariaDB offers point-in-time restore for up to 365 days.

Azure Database for MySQL always requires SSL connections.

YES

NO

YES

Yes - The pgAdmin tool can indeed be used to manage Azure Database for PostgreSQL.
No - Azure Database for MariaDB offers point-in-time restore, but the backup retention period can be configured up to 35 days, not 365 days.
Yes - By default, Azure Database for MySQL enforces SSL connections between your server and your client applications to protect against “man in the middle” attacks

191)

Answer Area

Azure Data Explorer uses  to explore, filter, and aggregate data quickly.



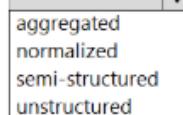
KQL

192)

Select the answer that correctly completes the sentence.

Answer Area

An online analytical processing (OLAP) model stores  data that is optimized for analytical workloads.



aggregated

193)

How is raw data stored in a data lakehouse?

- A.as tables
- B.as queues
- C.as files**
- D.as disks

194)

In an analytical data model, which type of table contains entities that are used to aggregate numeric values, where each entity is represented by a row with a unique key value?

- A.bridge
- B.dimensión
- C.fact**

195)

In a fully denormalized database, how is data read and written for a single entity?

- A.Data is read from a single table and written to a single table.**
- B.Data is read from multiple tables and written to a single table.
- C.Data is read from a single table and written to multiple tables.
- D.Data is read from multiple tables and written to multiple tables.

Denormalization involves consolidating data into a single table to reduce the need for joins and simplify querying. This results in improved read performance as all the necessary data for a single entity can be retrieved from a single table without requiring joins with other tables. Similarly, when writing data, it is written to a single table without the need to update multiple tables. This approach is commonly used in data warehousing and reporting scenarios where read performance is prioritized over storage efficiency and data modification speed.

196)

What is the typical latency for read operations against media files stored in the Cool access tier of Azure Blob Storage?

A.a few milliseconds

B.a few seconds

C.a few minutes

D.a few hours

197)

Which three services support Apache Spark? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A.Azure Data Explorer

B.Azure Synapse Analytics

C.Azure Databricks

D.Azure Stream Analytics

E.Azure HDInsight

198)

Select the answer that correctly completes the sentence.

Answer Area

In Microsoft Power BI, you can create

a dashboard
a fact table
a unique key
an attribute hierarchy

to quickly drill-up or drill-down to find aggregated values at different levels of a dimension.

an attribute hierarchy.

An attribute hierarchy allows you to organize dimension attributes into a hierarchical structure, typically with multiple levels of granularity. This enables users to easily navigate through different levels of detail within a dimension when analyzing data.

199)

NOTE: Each correct selection is worth one point.

Answer Area	Statements	Yes	No
	In Azure Blob Storage, each block in a block blob is a fixed size.	<input type="radio"/>	<input type="radio"/>
	In an Azure Blob Storage account, blobs are stored in a container.	<input type="radio"/>	<input type="radio"/>
	In an Azure Blob Storage account that does NOT have a hierarchical namespace enabled, you can assign access at the folder level.	<input type="radio"/>	<input type="radio"/>

NO

NO

YES

Aquí están las respuestas correctas:

1. **In Azure Blob Storage, each block in a block blob is a fixed size.** → No
 - Los bloques en un block blob pueden variar en tamaño (hasta 4000 MiB por bloque).
2. **In an Azure Blob Storage account, blobs are stored in a container.** → Yes
 - Los contenedores son la unidad lógica de organización dentro de una cuenta de Blob Storage.
3. **In an Azure Blob Storage account that does NOT have a hierarchical namespace enabled, you can assign access at the folder level.** → No
 - Sin espacio de nombres jerárquico (Hierarchical Namespace), no existe un concepto real de "carpeta"; solo nombres de blobs con prefijos. No se puede asignar acceso a nivel de carpeta.

200)

Answer Area

The pipeline engine used in Azure Data Factory is also available in

Azure Databricks.
Azure HDInsight.
Azure SQL Database.
Azure Synapse Analytics.

synapse analytics

201)

Answer Area

To add a new attribute to an entity in structured data, you need to

- add a tag to the relevant entities for which you have information.
- update all the records in the entity table to include the new column.
- update only the records in the entity table for which you have information.

update all the records in the entity table to include the new column

202)

The pipeline engine used in Azure Data Factory is also available in

- Azure Databricks.
- Azure HDInsight.
- Azure SQL Database.
- Azure Synapse Analytics.

Synapse Analytics

203)

Hot Area:

Answer Area

Creating closed caption text for audio files is an example of

- cognitive
- descriptive
- predictive
- prescriptive

cognitive

204)

Answer Area

In an analytical model, any point where the dimensions intersect represents

- a cube.
- an aggregated dimension.
- an aggregated measure.

aggregated measure

In an analytical model, any point where dimensions intersect represents an aggregated measure. These intersections represent specific data points within the multidimensional structure, and the aggregated measures provide quantitative values based on the selected dimensions and context. Each intersection corresponds to a unique combination of

dimension values, and the aggregated measure represents the result of applying aggregation functions (such as sum, average, count, etc.) to the underlying data associated with that combination of dimension values.

205)

You have data in a tabular format as shown in the following table.

ID	First name	Last name	Email
1000	Ben	Smith	ben smith@contoso.com
1001	Carlos	Grilo	carlos grilo@contoso.com

Of which type of data is this an example?

- A. unstructured data
- B. semi-structured data
- C. document
- D. structured data

Structured

206)

Answer Area

combines a scalable, high-performance Microsoft SQL Server-based relational data warehouse

Azure Databricks
Azure HDInsight
Azure Stream Analytics
Azure Synapse Analytics

with the flexibility of a data lake and open-source Apache Spark.

synapse analytics

207)

What can you use to create data ingestion pipelines?

- A.Azure HDInsight
- B.Azure SQL Database
- C.Azure Data Factory**
- D.Azure Cosmos DB

208)

Which service is optimized for IoT scenarios that involve streaming time series data?

- A.SQL Server on Azure Virtual Machines
- B.Azure SQL Managed Instance
- C.Azure SQL Database
- D.Azure SQL Edge**

209)

Answer Area

Azure Blob Storage page blobs are optimized for

append operations.
random read and write operations.
storing key/value data.
storing large binary objects that change infrequently.

random read and write operations

210)

Select the answer that correctly completes the sentence.

Answer Area

Apache Spark Structured Streaming is built on a

dataframe
delta lake
data lake
data warehouse

that is used to encapsulate a single table of data.

dataframe

211)

GRANT, REVOKE, and DENY are examples of which type of SQL statement?

- A.Data Definition language (DDL)
- B.Data Control Language (DCL)**
- C.Data Manipulation Language (DML)

212)

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

- A.SELECT
- B.INSERT
- C.CREATE**
- D.MERGE

213)

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.

Terms	Answer Area	
Atomicity		Concurrent transactions cannot interfere with one another and must result in a consistent database state.
Consistency		Each transaction is treated as a single unit that succeeds completely or fails completely.
Isolation		Transactions can only take the data in a database from one valid state to another.
Durability		When a transaction is committed, it will remain committed.

Isolation
Atomicity
Consistency
Durability

214)

What is the responsibility of a database administrator?

- A.applying data cleaning routines
- B.create data visualizations
- C.managing data integration processes
- D.storing backup copies of data

215)

Answer Area

Azure Analysis Services
Azure Automation
Azure Data Lake Analytics
Microsoft Power BI

can be used to simplify the process of embedding the results of data analysis on webpages for external users.

power bi

216)

Match the database normalization 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.

Terms	Answer Area	
Attributes		Get separated into individual columns
Entities		Get separated into individual tables
Foreign keys		Link two related entities
Primary keys		
Schemas		

Attributes

Entities

Foreign keys

Attribute - Get separated into individual columns

In a database, an attribute typically refers to a column in a table, which is where individual data elements of an entity are stored.

Entities - Get separated into individual tables

Entities in a database are typically represented as tables. Each table represents a specific type of object or concept within the system.

Foreign Keys - Link two related entities

A foreign key is a field (or collection of fields) in one table that uniquely identifies a row of another table. It is used to establish and enforce a link between the data in two tables.

Primary keys are the unique identifier for each record in a table.

Schema refers to the organization or structure of a database, including its tables, views, relationships, and other elements.

217)

You have the following T-SQL statement.

```
SELECT o.OrderNo, o.OrderDate, c.Address, c.City
```

```
FROM Order AS o -
```

```
JOIN Customer AS c -
```

```
ON o.Customer = c.ID;
```

What is the function of the ON clause?

A.to update data in the Customer table

B.to match data in the Customer table to data in the Order table

C.to define an alias for the Customer table

D.to update data in the Order table

218)

Answer Area

To create a dashboard, you can use

- only the Microsoft Power BI Desktop app
- only the Microsoft Power BI mobile app
- only the Microsoft Power BI service
- either the Microsoft Power BI Desktop app or the Power BI service

service

219)

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
Data engineers identify data governance rules.	<input type="radio"/>	<input type="radio"/>
Data engineers create data ingestion pipelines.	<input type="radio"/>	<input type="radio"/>
Data engineers implement backup and recovery processes for database systems.	<input type="radio"/>	<input type="radio"/>

NO

YES

NO

220)

Answer Area

Statements	Yes	No
Batch processing is optimized for handling large datasets.	<input type="radio"/>	<input type="radio"/>
Stream processing is optimized for performing complex analysis of datasets.	<input type="radio"/>	<input type="radio"/>
The latency of batch processing is typically measured in seconds or milliseconds.	<input type="radio"/>	<input type="radio"/>

YES

NO

NO

221)

Structured data where each row represents a single data entity uses which type of schema?

- A.XML
- B.tabular**
- C.blob
- D.JSON

222)

You have an Azure SQL database that contains tables for customers and orders.

You need to create a query that will return the orders placed by each customer.

Which two Transact-SQL statements should you include in the query? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A.INDEX
- B.EXISTS
- C.JOIN**
- D.ORDERBY
- E.SELECT**

223)

Answer Area

An extract, transform, and load (ETL) process
requires

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

data that is fully processed before being loaded to the target data store

224)

Answer Area

A visualization that illustrates a university's current student enrollment per department is an example of

cognitive
descriptive
predictive
prescriptive

analytics.

descriptive

225)

Answer Area

The workflow for creating an analytics solution in Microsoft Power BI starts with

Power BI Desktop.
the Power BI phone app.
the Power BI service.

desktop

226)

You have a database that stores data in the format shown in the following table.

Key	Customer		Product	
	Name	Address	Name	Price
1000	Ben Smith	1 Main St.	Spark plug	20.99
1001	Carlos Grilo	123 Elm Pl.	Spanner	10.25

Of which type of database is this an example?

- A. column family
- B. relational
- C. key-value
- D. document

column family

- B. Relational Relational databases use flat tables, not nested fields
- C. Key-Value Key-value stores don't support grouped fields — just key and a single value
- D. Document Document stores (e.g., MongoDB) store data as JSON-like documents, not column families

227)

You need to implement an Azure platform as a service (PaaS) service that will host a relational database. The solution must support built-in autoscaling.

Which service should you implement?

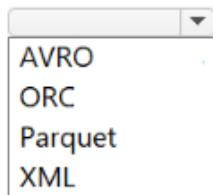
- A.Azure SQL Database
- B.SQL Server on Azure Virtual Machines
- C.Azure SQL Managed Instance
- D.Azure SQL Edge

228)

Select the answer that correctly completes the sentence.

Answer Area

A



is a row-based file format where each record contains a JSON header and binary data.

AVRO

229)

Answer Area

Statements

Yes **No**

In non-relational databases, data is always stored in tables.

In non-relational databases, data is always stored by using a fixed schema.

In non-relational databases, two entities in the same collection can have different sets of fields.

NO

NO

YES

230)

Answer Area

Statements

Yes **No**

Stream processing can process all the data in a dataset at once.

Batch processing occurs immediately, with latency in the order of seconds or milliseconds.

Stream processing is used for simple response functions, aggregates, or calculations, such as rolling averages.

NO

NO

YES

231)

NOTE: Each correct selection is worth one point.

Answer Area

Statements

Yes **No**

Each Azure SQL managed instance supports multiple databases that can be accessed by using cross-database queries.

Elastic pools are used to share resources across multiple instances of SQL Server on Azure Virtual Machines.

Azure SQL Database is fully compatible with both on-premises physical instances and virtualized instances of Microsoft SQL Server.

YES

NO

NO (Azure SQL Database is highly compatible with SQL Server but not fully compatible. Some SQL Server features, such as SQL Server Agent and cross-database transactions, are not supported in Azure SQL Database. Full compatibility is achieved with Azure SQL Managed Instance, not Azure SQL Database.)

232)

Answer Area

Azure Data Factory
Azure Databricks
Azure Analysis Services

is the Azure implementation of a comprehensive data analytics solution that is built on Apache Spark and is available on multiple cloud platforms.

Databricks

233)

You have the following data.

```
{  
    "firstName": "John",  
    "lastName": "Doe",  
    "address":  
    {  
        "streetAddress": "1 Main St.",  
        "city": "New York",  
        "state": "NY",  
        "postalCode": "10099"  
    },  
    {  
        "firstName": "Jane",  
        "lastName": "Doe",  
        "address":  
        {  
            "streetAddress": "1 Main St.",  
            "city": "New York",  
            "state": "NY",  
            "postalCode": "10099"  
        },  
        "contact":  
        [  
            {  
                "type": "email",  
                "address": "jane.doe@contoso.com"  
            }  
        ]  
    }  
}
```

Which type of data is this?

- A. unstructured
- B. semi-structured
- C. structured

B) semi

234)

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

235)

Answer Area

The Azure Cosmos DB

Core (SQL)
Gremlin
MongoDB
Table

API enables the use of SELECT statements to

retrieve documents from Azure Cosmos DB.

Core (SQL)

236)

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

237)

Answer Area

Statements

Yes

No

Extract, transform, and load (ETL) can reduce the transfer of sensitive data to destination systems.

Extract, load, and transform (ELT) transforms data by using a compute resource independent of the source system and destination system.

Extract, load, and transform (ELT) minimizes the time it takes to copy large volumes of data to destination systems.

YES

NO

YES

238)

You plan to deploy a PostgreSQL database to Azure.

Which hosting model corresponds to the available deployment options? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

PostgreSQL on Azure VMs:

Infrastructure as a service (IaaS)
Platform as a service (PaaS)
Software as a service (SaaS)

Azure Database for PostgreSQL:

Infrastructure as a service (IaaS)
Platform as a service (PaaS)
Software as a service (SaaS)

IAAS

PAAS

239)

Which Azure storage solution provides native support for POSIX-compliant access control lists (ACLs)?

A.Azure Table storage

B.Azure Data Lake Storage

C.Azure Queue storage

D.Azure Files

240)

Relational data is stored in

a file system as unstructured data.
a hierachal folder structure.
a tabular form of rows and columns.
comma-separated value (CSV) files.

tabular form of rows and columns

241)

Answer Area

In batch processing,

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

latency in delivering data processing results is acceptable

242)

Answer Area

A block of code that runs in a database is called

- a stored procedure.
- a table.
- a view.
- an index.

a stored procedure

243)

Analytics Types

Answer Area

Cognitive

Why did sales increase last month?

Diagnostic

Provide specific guidance on how to allocate current budget to buy different inventory items.

Descriptive

Detect images of the company's logo included in PDF documents

Predictive

diagnostic (why)

prescriptive

cognitive

244)

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

245)

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

A.Azure Data Lake Storage

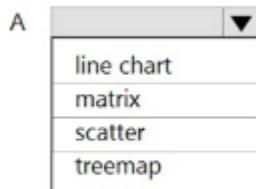
B.Azure Queue storage

C.Azure Blob storage

D.Azure Cosmos DB

246)

Answer Area



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.

TREEMAP

247)

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.

248)

Answer Area

In a SQL statement,

▼
FROM and WHERE
GROUP BY and ORDER BY
JOIN and MERGE
MAX and MIN

are examples of aggregate functions.

Max and Min

249)

Answer Area

Statements

Yes No

A job that processes sales data once daily is an example of a batch workload.

A job that calculates a rolling average temperature reading is an example of a streaming workload.

A job that calculates average revenue per product for the last month is an example of a streaming workload.

YES

YES

NO

250)

Hot Area:

Answer Area

Transcribing audio files is an example of

▼
cognitive
descriptive
predictive
prescriptive

analytics.

cognitive

251)

In a relational database, each row in a table has

a different set of columns
a key-value pair
the same set of columns
unstructured data

the same set of columns

252)

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"/>

Normalizing a database increases the throughput of writing transactions. → Yes

- Normalization reduces redundancy, meaning fewer updates are needed when data changes, improving write efficiency in transactional systems.

Analytics systems are more normalized than transactional systems. → No

- Analytics systems (data warehouses) are typically **denormalized** for faster query performance, unlike transactional systems (OLTP), which are more normalized.

Normalizing a database results in queries that require more joins. → Yes

- Normalization splits data into multiple related tables, so retrieving complete information often requires joining these tables

253)

Answer Area

▼
Column family databases
Document databases
Graph databases
Key-value stores

natively support the analysis of relationships between entities

graph

254)

Answer Area

A key/value data store is optimized for

▼
enforcing constraints.
simple lookups.
table joins

simple lookups

255)

Answer Area

In an infrastructure as a service (IaaS) instance of Microsoft SQL Server on Azure, you manage the

▼
elastic pool
MySQL server
PostgreSQL server
virtual machine

that hosts SQL Server

vm

256)

Answer Area

Varying fields for each entity in a JSON document is an example of

▼
relational data.
semi-structured data.
structured data.
unstructured data.

semi

257)

Answer Area

A JSON document is an example of

graph data.
relational data.
semi-structured data.
unstructured data.

semi

258)

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

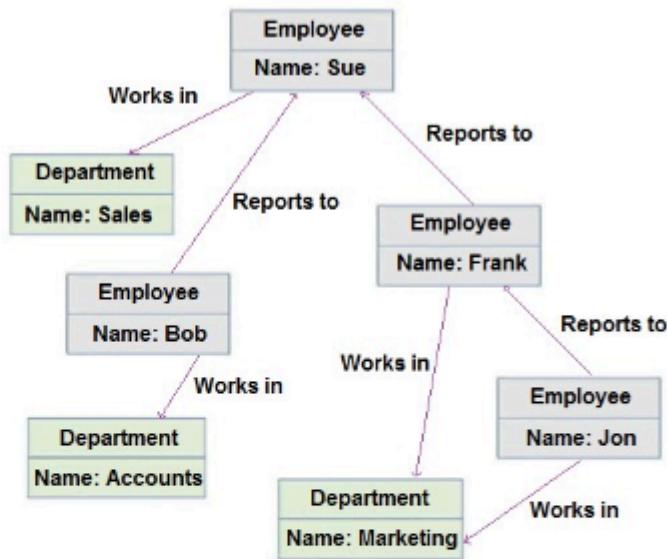
B.isolation

C.durability

D.consistency

259)

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

graph

260)

Which type of database contains nodes and edges?

A.graph

B.key/value

C.columnar

D.time series

261)

DRAG DROP -

Match the types of analytics that can be used to answer the business questions.

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

NOTE: Each correct match is worth one point.

Select and Place:

Analytics Types	Answer Area
Cognitive	Why did sales increase last month?
Diagnostic	How do I allocate my budget to buy different inventory items?
Descriptive	Which people are mentioned in a company's business documents?
Predictive	
Prescriptive	

Descriptive
prescriptive
cognitive

262)

Hot Area:

Answer Area

▼	is responsible for identifying which business rules must be applied to the data of a company.
A data analyst	
A data engineer	
A data scientist	

data analysis

Explanation:

- **Data Analyst:** Understands business requirements and determines **which business rules must be applied** to ensure data supports decision-making.
- **Data Engineer:** Focuses on building and maintaining data pipelines and infrastructure.
- **Data Scientist:** Focuses on advanced analytics, modeling, and machine learning, not defining business rules.

263)

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. MERGE
- C. UPDATE
- D. CREATE

Update

264)

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

265)

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

266)

Select and Place:

Terms	Answer Area
Index	
View	
Table	

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

table

view

index

267)

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)

268)

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

269)

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

270)

Select and Place:

Tools	Answer Area
Azure Data Studio	Tool A graphical tool for managing SQL Server or Azure SQL databases that supports access, configuration, management, and administration tasks.
Microsoft SQL Server Data Tools (SSDT)	Tool 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 Management Studio (SSMS)	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.

SSMS

Azure data studio

SSDT

271)

You have the following JSON document.

```
"customer" : {  
    "first name" : "Ben",  
    "last name" : "Smith",  
    "address" : {  
        "line 1" : "161 Azure Ln",  
        "line 2" : "Palo Alto",  
        "ZIP code" : "54762"  
    },  
    "social media": [  
        {  
            "service" : "twitter",  
            "handle" : "@bensmith"  
        },  
        {  
            "service" : "linkedin",  
            "handle" : "bensmith"  
        }  
    ],  
    "phone numbers": [  
        {  
            "type" : "mobile",  
            "number" : "555-555-555"  
        }  
    ]  
}
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the JSON document.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Customer is [answer choice].

a nested array
a nested object
a root object

Address is [answer choice].

a nested array
a nested object
a root object

Social media is [answer choice].

a nested array
a nested object
a root object

root Object
nested object
nested object

272)

Answer Area

Statements

Yes

No

Relational database tables contain columns and rows

Indexes in a relational database describe the data types in a table

A database view is a virtual table whose content is defined by a query

YES
NO
YES

273)

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

A.sqlcmd

- B.bcp
- C.azdata
- D.Azure CLI

274)

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"/>

Show Answer

YES
YES
YES

275)

Answer 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"/>

YES
YES
YES

276)

Answer 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"/>

YES

YES

YES

277)

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:

Answer Area

Dbo.Products :

A column
A database
A table
An index

ProductName :

A column
A database
A table
An index

table
column

278)

Answer Area

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"/>

NO

NO

YES

279)

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

- A.SELECT
- B.JOIN
- C.UPDATE
- D.CREATE

280)

Answer Area

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"/>

YES

NO

YES

281)

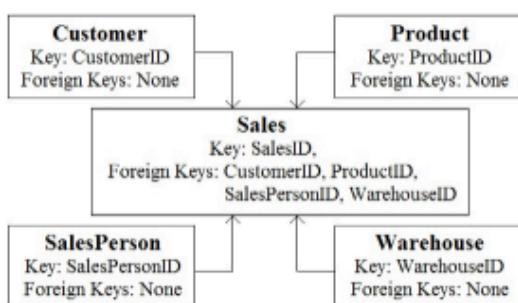
You are deploying a software as a service (SaaS) application that requires a relational database for Online Transaction Processing (OLTP).

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

282)

You are reviewing the data model shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point

Hot Area:

Answer Area

The data model is a [answer choice].

transactional model
star schema
snowflake schema

Customer is a [answer choice] table.

fact
dimension
bridge

star schema
dimension

283)

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**

284)

Answer Area

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"/>

NO
YES
NO

285)

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	Answer Area
<input type="button" value="CREATE"/> <input type="button" value="GROUP BY"/> <input type="button" value="ORDER BY"/> <input type="button" value="SELECT"/>	<input type="text" value="Value"/> SalesDate, AVG(SalesAmount) <input type="text" value="Value"/> FROM Sales <input type="text" value="Value"/> ORDER BY SalesDate

Select
Group by

286)

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

287)

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

A.SELECT

B.INSERT

C.DELETE

D.DROP

D. DROP

Explanation:

- **DDL (Data Definition Language)** deals with defining and managing database structures (schemas, tables, indexes). Examples: **CREATE, ALTER, DROP, TRUNCATE**.
- **DML (Data Manipulation Language)** deals with manipulating data within tables. Examples: **SELECT, INSERT, UPDATE, DELETE**.

288)

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) (no corre queries)

C.Azure Data Studio

D.Azure Data Explorer

289)

Hot 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.

the database to protect data at rest

290)

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

291)

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

292)

By default, each Azure SQL database is protected by

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

a server level firewall

Correct answer: "a server level firewall"

Azure SQL has it's own Firewall and firewall rules options

It is not "Azure Firewall" though:

"Azure Firewall is a managed, cloud-based network security service that protects your Azure Virtual Network resources. It's a fully stateful firewall as a service with built-in high availability and unrestricted cloud scalability."

293)

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

Hot Area:

Answer Area

The massively parallel processing (MPP) engine of Azure

Synapse Analytics

- distributes processing across compute nodes.
- distributes processing across control nodes.
- redirects client connections across compute nodes.
- redirects client connections across control nodes.

distributes processing across compute nodes

294)

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

A. Microsoft SQL Server Data Tools (SSDT)

- Es un **entorno de desarrollo** dentro de **Visual Studio**.
- Permite diseñar, desarrollar, probar e implementar:
 - **Bases de datos relacionales** (SQL Server, Azure SQL Database).
 - **Modelos de datos tabulares** (Analysis Services).
 - **Paquetes ETL** (Integration Services - SSIS).
 - **Modelos multidimensionales** (Analysis Services - SSAS).
 - **Reportes** (Reporting Services - SSRS).
- Ideal para **desarrolladores de bases de datos y BI**.

B. Microsoft SQL Server Management Studio (SSMS)

- Es una **herramienta de administración** para SQL Server y Azure SQL Database.
- Permite:
 - **Crear, modificar y administrar bases de datos.**
 - **Ejecutar consultas SQL.**
 - **Configurar seguridad, usuarios y permisos.**
 - **Monitorear rendimiento del servidor.**
- Es usada principalmente por **DBAs (Administradores de Bases de Datos)** y desarrolladores para tareas operativas.

295)

Match the security components to the appropriate scenarios.

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

NOTE: Each correct match is worth one point.

Select and Place:

Components	Answer Area
Authentication	<input type="text"/>
Firewall	<input type="text"/>
Encryption	<input type="text"/>

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.

Firewall

Authentication

Encryption

296)

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).

297)

Hot Area:

Answer Area

A relational database must be used when

a dynamic schema is required.
data will be stored as key/value pairs.
storing large images and videos.
strong consistency guarantees are required.

strong consistency guarantees are required

298)

Hot Area:

Answer Area

Relational data uses ▼ to enforce relationships between different tables.

collections
columns
keys
partitions

keys

299)

Hot Area:

Answer Area

▼ is a virtual table that contains content defined by a query.

A heap
A stored procedure
A view
An index

a view

heap: tables: without a clustered index.

Stored procedure: a sub-routine available to access application in RDBMS

A view: is a table that is being created based on a user query

An index: a data structure that improves the speed of data retrieval operations

300)

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.

NOTE: Each correct selection is worth one point.

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.

301)

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

302)

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

303)

Match the Azure SQL services to the appropriate use cases.

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

NOTE: Each correct match is worth one point.

Select and Place:

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

elastic pool

database

managed instance