1. **What are some features of Azure Storage?:** Its durable and highly available, Secure, Scalable, Managed, and Accessible

2. **What are the three categories of Azure storage?:** Storage for Virtual Machines, Unstructured Data, Structured Data

3. **What are the two tiers of storage?:** Standard with HDDs and Premium with SSDs

4. **What data services are available through a storage account?:** Azure Containers (Blobs), Azure Files, Azure Queues, Azure Tables

5. **What is Azure Container (blob) Storage?:** Storage for massive ammounts of unstructured data, such as text or binary data. Ideal for images or documents directly to browser, files for distributed access, Streaming video and audio

6. **What is Azure File storage?:** Highly available network file shares that can be accessed using SMB. You can access the files from anywhere in the world using a URL that points to the file and includes a (SAS) Token

7. **What is Azure Queue storage?:** Used to store and retrieve messages, can be up to 64 KB in size and store lists of messages to be processed asynchronously

8. **What is Azure Table Storage?:** An Azure Cosmos DB Table API that offers throughput-optimized tables, global distribution, and automatic secondary indexes. Ideal for storing structured, non-relational data.

9. **What are the 4 replication options available with storage?:** LRS, ZRS, GRS/RA-GRS, GZRS/RA-GZRS

10. **What is LRS storage?:** Locally Redundant Storage, Lowest cost replication option that replicates in a datacenter.

11. **What is ZRS storage?:** Zone redundant storage, replicates your data across three storage clusters in a single region, physically separate from the others in its own availability zone.

12. **What is GRS storage?:** Geo-Redundant storage (GRS) replicates your data to a secondary region, Costs more but data is available even if there is a regional outage. Provides 16 9's durability.

13. **What is RA-GRS storage?:** Read-access GRS, Replicates your data to another data center in a secondary region, and also provides you with the option to read from that region.

14. **What is GZRS storage?:** Geo-Zone-Redundant storage, Combines the HA of zone redundant storage with protection from regional outages as provided by geo-redundant storage.

15. **What are the default endpoints for your storage account?:** Container service, table service, queue service, and file service

16. **Does Azure storage support HTTPS with custom domains?:** Not yet, use Azure CDN to access using HTTPS

17. **What is Direct CNAME mapping?:** Enables a custom domain to point to a storage account url

18. **What is Intermediary mapping with asverify?:** You permit azure to recognize your custom domain without modifying the DNS record for the domain

19. **How do you restrict network access to storage account?:** Using the Firewalls and virtual networks blade to add the virtual network that will have access.

20. **What is a blob container?:** A grouping of a set of blobs, all blobs must be in a container. Must only contain lowercase letters, numbers, and hyphens, must begin with a letter or a number, must be between 3 and 63 characters long. Can be private, blob for anonymous public read, or container for anonymous public read and list

21. **What are the blob access tiers?:** Hot, Cool, and archive

22. **What is the hot tier?:** Optimized for frequent access of objects in the storage account

23. **What is the cool tier?:** Optimized for storing large amounts of data that's infrequently access and stored for at least 30 days

24. **What is the archive tier?:** Takes several hours of retrevial latency and will remain for 180 days, expensive to access data.

25. **What is the blob lifecycle management policy?:** Allows you to transition blobs to a cooler storage tier to optimize performance and cost, Delete blobs at the end of their lifecycles, define rules to run once per day at the storage account level, apply rules to containers or a subset of blobs

26. **What is blob object replication?:** asynchronously copies block blobs in a container according to the rules that you configure.

27. **What are the three types of blobs?:** Block blobs, append blobs, and page blobs.

28. **What are block blobs?:** Consist of blocks data assembled to make a blob. ideal for text and binary data like images, files, and videos

29. **What are Append blobs?:** Block blobs optimized for append operations, so they are useful for logging scenarios

30. **What are page blobs?:** can be up to 8 TB in size and are more efficient for frequent read/write operations. Azure VMs use page blobs as OS and data disks

31. **How is data encrypted in Azure Storage?:** Using Storage Service Encryption (SSE)

32. **How do you secure data in transit?:** Can be secured by using client-side encryption, HTTPS, or SMB 3.0

33. **How are disks encrypted?:** OS and Data disks used by azure vms can be encrypted with Azure Disk Encryption

34. **What are shared access signatures (SAS)?:** A URI that grants restricted access rights to Azure Storage resources.

35. **What is the difference between an account and service SAS?:** Account SAS delegates access to resources in one or more of the storage services, a Service SAS just gives access to one of the storage services.

36. **In a SAS URI what is the Resource URI ?:** The service endpoint you are granting access to.

37. **In a SAS URI what is the Storage services version?:** For service versions 2012-02-12 and later, this parameter indicates the version to use.

38. **How do you manage your encryption keys?:** Azure Key Vault

39. **What are the risks of SAS?:** If it is compromised, anyone who obtains it can use it.
If it expires and an application cant retrieve a new SAS, the functionality may be hindered.

40. **Why use Azure File Storage?:** Replacing or supplementing a current file share on prem. Accessible anywhere. Lift and shift applications to the cloud. Azure File Sync. Shared Applications. Diagnostic Data. Tools and utilities for VMs or cloud services.

41. **How do you compare Azure Files to Azure Blobs?:** Files uses an SMB interface and Blobs use a REST interface for unstructured data. Files is a more typical way of moving data to the cloud vs Blobs which specialize in data streams and random-access scenarios.

42. **How do you Create An Azure File Share:** Create a Storage account, Provide the file share name and quota, Quota is total size of files on the share. Select connect from your file share page to connect windows or windows server. Ensure port 445 for SMB communications. the CIFS kernel client can be used to mount in Linux distributions. Secure transfer is required so use HTTPs or it wont work.

43. **What are file share snapshots?:** Snapshots provide point in time read only copies of your data, only the data that is changed is saved (incremental in nature).

44. **Why use azure file share snapshots?:** It helps protect against application error and data corruption, Protects against accidental deletions or unintended changes, and is helpful for general backup purposes.

45. **What is Azure File Sync?:** It centralizes your organizations file shares in Azure files while keeping the flexibility, performance, and compatibility of any on-premises file server.

46. **What are the terms you need to know to understand Azure File Sync?:** Storage Sync Service
Sync group
Registered server
Azure File Sync agent

Server endpoint
Cloud endpoint

47. **What is the storage sync service?:** A top-level Azure resource for Azure File Sync. The Storage Sync Service resource is a peer of the storage account resource, and can similarly be deployed to Azure resource groups. This can be connected to multiple storage accounts, and needs to be deployed above them in the hierarchy to provide services to accounts below it.

48. **What is a sync group?:** Defines the sync topology for a set of files. Endpoints within a sync group are kept in sync with eachother. Can be used to separate files from endpoints by defining distinct sets of files to go to certain endpoints.

49. **What is a registered Server in azure file sync?:** This object represents the trust relationship between your server and the storage sync service.

50. **What is the Azure File Sync Agent?:** A downloadable package that enables Windows Server to be synced with Azure file share.

51. **What is a server endpoint in Azure File Sync Agent?:** Represents a specific location on a registered server, such as a folder on a server volume.

52. **What is a cloud endpoint?:** An Azure file share that is part of a sync group

53. **What s cloud tiering in Azure file Sync?:** A feature that archives infrequently access files to free up space on the local file share

54. **What is Azure Storage Explorer?:** A standalone app that makes it easy to work with azure storage data

55. **What can you connect to Azure Storage Explorer?:** Accounts associated with your Azure subscriptions, accounts and services that are shared from other Azure subscriptions, local storage by using Azure Storage Emulator

56. **What do you need to connect to external storage accounts?:** An account name and account key.

57. **What is the Azure Import/Export service?:** You can take data you have on hard drives and ship it to Azure datacenters to have it uploaded, or export data to drives and have it delivered to you.

58. **What tool do you use to prepare drives for Azure Import/Export?:** WAImportExport tool

59. **What is AzCopy?:** A command line utility to copy files to and from azure blob and file storage

60. **What four data services comprise Azure storage?:** Azure Blobs, Azure Files, Azure Queues, Azure Tables

61. **What is a storage account?:** a container that groups a set of Azure Storage Services together

62. **What are some azure data services that are not able to be included in an Azure storage account?:** Azure SQL and Azure Cosmos DB

63. **What are settings you can configure in a storage account?:** Subscription, Location, Performance, Replication, Access tier, Secure transfer required, Virtual networks

64. **What is a reason to have multiple storage accounts?:** Settings need to be different for differing data sets. such as location or performance

65. **What is the recommended settings for a storage account?:** Resource Manager Model, StorageV2

66. **What's the typical flow in deploying a storage account?:** First analyze your data and goals, and then configure the storage account options to match.

67. **What is a Shared Access Signature (SAS)?:** A Secure way of granting access to resources for clients

68. **What are the four options available to secure access to blob storage?:** Public Access, Azure AD, Shared Key, Shared Access Signature

69. **What is Public Access?:** Anonymous client access, anyone has read access to the files in blob storage, they just need a URL.

70. **What is Azure AD access?:** First you authenticate a security principle and it returns a OAuth 2.0 token if successful. This token is then passed to Azure storage to give you access. This method does not store any credentials in your code.

71. **What is a Shared Key?:** Azure Storage creates two 512-bit access keys for every storage account that's created. You share these keys to grant clients access, anyone with the key has root access to your storage.

72. **What is Shared access signature (SAS)?:** A SAS lets you grant granular access to files in azure storage, its a key that grans permission to a storage resource, and should be protected in the same manner as an account key

73. **Can you associate a stored access policy with a SAS?:** Yes, during creation of a service SAS you can associate it with this. you are limited to only 5 SASs being connected at a time

74. **What two components do you need to use a SAS to access data?:** A URI to the resource, and a SAS token that was created

75. **What are Stored Access Policies?:** Policies that configure the start time for access, the expiry time for access, and the permissions you will be giving for this policy. Also a name of the policy.

76. **What is the azure-CLI command to create a storage account:** az storage account create

77. **What is the azure-CLI command to create a file share?:** az storage share create

78. **What is a benefit of Storage explorer over the Azure portal?:** You can manage multiple storage accounts over multiple subscriptions