

Subject: GCF (203105376)

Chapter-1

1. Explain the components of cloud computing.
2. What are the types of Cloud Computing Services?
3. Explain about Cloud Computing Architecture and its Components.
4. List out benefits of Cloud computing and describe each of them
5. What are the main advantages of cloud computing?
6. Describe consumption-based model.
7. What are the types of cloud model?
8. Define the differences between Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).
9. Describe public, private, community and hybrid clouds with its advantages and disadvantages?
10. Explain shared responsibility model.
11. Describe in short High Availability
12. Describe scalability and types of Scalability.
13. Differentiate between regions and Availability Zones.
14. What is cloud ? Explain the difference between on-premise and cloud computing solution.
15. Explain the process of virtualization in short.
16. Explain the principles of cloud computing.
17. What is cloud computing ?
18. Give some real time applications of cloud computing.
19. Explain Scalability, High Availability, Reliability and Predictability.

Chapter-2

1. What is Serverless Computing? List an example of serverless computing service in Azure.
2. What is an Azure Subscription? Mention types of Subscriptions, Management Groups, Resource Groups and Resources in Azure.
3. What is Azure Blob Storage used for?
4. What is the difference between Azure Blob Storage and Azure File Storage?
5. What are azure containers?
6. What is Azure App Service?
7. Explain about LRS, GRS, ZRS and RA-GRS with appropriate Figure.
8. What is Azure Virtual Networking
9. What is Azure SQL Database?
10. Explain about SQL Database elastic pool and SQL Managed Instance Pool.
11. List and Explain various Redundancy/Replication options available in Azure Storage Service.
12. List out most common use cases of Azure Functions.
13. What are the benefits of using Azure Virtual Machines compared to managing physical servers?
14. How does Azure App Service simplify web application development and deployment?
15. What are the advantages of using Azure SQL Database Managed Instance compared to Azure SQL Database?
16. How does Azure Container Instances differ from Azure Kubernetes Service (AKS)?
17. What are the different pricing models available for Azure services?

Chapter-3

1. Describe Azure Active Directory and its various features including RBAC, MFA and SSO.
2. Write a brief note on Authentication and Authorization

3. Explain briefly about SSO and Multifactor Authentication
4. Describe Azure Authentication methods.
5. What is Single Sign –On?
6. What is Multi-Factor Authentication?
7. What is RBAC?
8. How does RBAC works?
9. How does Azure AD provide single sign-on (SSO) capabilities?
10. What is multi-factor authentication (MFA) and its importance in Azure?
11. What is Azure AD? Explain different edition of Azure AD?
12. Explain the concept of Azure B2B and B2C.
13. Define Azure Zero trust model.
14. Explain defense in depth.
15. What is difference between Azure Firewall and NSG?
16. Explain the concept of Role-Based Access Control (RBAC) in Azure and how it helps manage access to resources.
17. How does Azure Key Vault help secure sensitive information like passwords and encryption keys?
18. Compare and contrast Azure Firewall and Network Security Groups (NSGs) in terms of their functionality and use cases.
19. How can Azure Monitor be used to identify and respond to potential security threats in Azure resources?
20. What is the Shared Responsibility Model for security in Azure, and what are the key responsibilities of Microsoft and the customer?

Chapter-4

1. What is the Azure Pricing Calculator, and how can it assist in estimating costs?
2. What is azure cost management ? Explain its features and functionalities.
3. Describe Azure's deprecation policies and their impact on services and users.
4. Describe the different Azure subscription options available.
5. Describe About Pricing calculator and TCO Calculator.
6. What are cost management factors are their in azure.
7. Explain azure support options.
8. What is Cost Management Capabilities in Azure and Describe about Budget Alerts, Credit Alerts and Department Spending Quota Alerts.
9. What are the Factors that affect cost in Azure?
10. Explain the differences between Azure Cost Management tools and the Azure Pricing Calculator. When would you use each?
11. Explain the role of Azure Advisor in cost optimization and how its recommendations can be implemented to improve resource efficiency and reduce cloud spending.
12. Describe the various cost allocation models available in Azure Cost Management and how they can be used to identify cost ownership across different teams or departments.
13. How can Azure Cost Management tools be leveraged to identify and eliminate unused or underutilized resources, leading to cost reduction?
14. Compare and contrast the cost implications of deploying applications on Azure Virtual Machines versus Azure App Service, considering factors like instance type, scaling options, and managed service features.

Chapter-5

1. What is the Purpose of Azure Advisor.
2. Describe Service Lifecycles in Cloud Computing.

3. Define Azure Service Level Agreements (SLAs) and explain their significance for businesses.
4. What is composite SLA?
5. Describe Azure service health
6. What resources are available to stay informed about upcoming Azure service updates, deprecation timelines, and potential impact on your deployments?
7. What are the different types of planned maintenance activities performed by Azure, and how can they affect your service availability?
8. How can Azure Monitor be used to track service health metrics and receive alerts for potential issues that could affect your applications?
9. What are the customer responsibilities outlined in the Shared Responsibility Model for ensuring the security and performance of Azure services?
10. Explain the concept of a "rolling update" for Azure services and how it minimizes downtime during planned maintenance activities.