Microsoft Azure Infrastructure and Deployment

https://www.microsoft.com/en-us/learning/exam-az-100.aspx

Manage Azure subscriptions and resources (15-20%)

Section 1: Manage Azure subscriptions

1.1   Assign administrator permissions
https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/directory-assign-admin-roles

1.2   Configure cost center quotas and tagging
https://docs.microsoft.com/en-us/azure/billing/billing-getting-started

1.3   Configure subscription policies
https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage

Section 2: Analyze resource utilization and consumption (also AZ-102)

2.1   Configure diagnostic settings on resources
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-of-diagnostic-logs

2.2   Create baseline for resources
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/download-template

2.3   Create and test alerts
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-alerts

2.4   Analyze alerts across subscription
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-unified-alerts

2.5   Analyze metrics across subscription
https://docs.microsoft.com/en-us/azure/monitoring/monitoring-data-collection

2.6   Create action groups
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-action-groups

2.7   Monitor for unused resources
https://docs.microsoft.com/en-us/azure/azure-monitor/overview

2.8   Monitor spend
https://docs.microsoft.com/en-us/azure/billing/billing-getting-started

2.9   Report on spend
https://docs.microsoft.com/en-us/azure/billing/billing-download-azure-invoice-daily-usage-date

2.10   Utilize Log Search query functions
https://docs.microsoft.com/en-us/azure/log-analytics/query-language/get-started-queries

2.11   View alerts in Log Analytics
https://docs.microsoft.com/en-us/azure/log-analytics/log-analytics-tutorial-response

Section 3: Manage resource groups

3.1   Allocate resource policies
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-overview

3.2   Configure resource locks
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-lock-resources

3.3   Configure resource policies
https://docs.microsoft.com/en-us/azure/governance/policy/

3.4   Implement and set tagging on resource groups
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-using-tags

3.5   Move resources across resource groups
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-move-resources

3.6   Remove resource groups
https://azure.microsoft.com/en-gb/resources/videos/removing-a-resource-group-in-azure/

Implement and manage storage (20-25%)

Section 4: Create and configure storage accounts

4.1   Configure network access to the storage account
https://docs.microsoft.com/en-us/azure/storage/common/storage-network-security

4.2   Create and configure storage account
https://docs.microsoft.com/en-us/azure/storage/common/storage-quickstart-create-account?tabs=portal

4.3   Generate shared access signature; install and use Azure Storage Explorer
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-dotnet-shared-access-signature-part-2

4.4   Manage storage access keys
https://docs.microsoft.com/en-us/azure/storage/common/storage-account-manage

4.5   Monitor activity log by using Log Analytics
https://docs.microsoft.com/en-us/azure/monitoring-and-diagnostics/monitoring-overview-activity-logs

4.6   Implement Azure storage replication
https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy

Section 5: Import and export data to Azure

5.1   Create export from Azure job
https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-service

5.2   Create import into Azure job
https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-to-files

5.3   Configure and use Azure blob storage
https://docs.microsoft.com/en-us/azure/storage/blobs/storage-quickstart-blobs-portal

5.4   Configure Azure content delivery network (CDN) endpoints
https://docs.microsoft.com/en-us/azure/cdn/cdn-create-new-endpoint

Section 6: Configure Azure files (also AZ-102)

6.1   Create Azure file share
https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share

6.2   Create Azure File Sync service
https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide?tabs=portal

6.3   Create Azure files sync group
https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-planning

https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-server-registration

6.4   Troubleshoot Azure File Sync
https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-troubleshoot?tabs=portal1%2Cportal

Section 7: Implement Azure backup

7.1   Configure and review backup reports
https://docs.microsoft.com/en-us/azure/backup/backup-azure-configure-reports

7.2   Perform backup operation
https://docs.microsoft.com/en-us/azure/backup/backup-azure-arm-vms-prepare

7.3   Create Recovery Services Vault
https://docs.microsoft.com/en-us/azure/backup/backup-azure-recovery-services-vault-overview

7.4   Create and configure backup policy

https://azure.microsoft.com/en-us/updates/azure-vm-backup-policy-management/

7.5   Perform a restore operation
https://docs.microsoft.com/en-us/azure/backup/backup-azure-arm-restore-vms

Deploy and manage virtual machines (VMs) (20-25%)

Section 8: Create and configure a VM for Windows and Linux

8.1   Configure VM high availability
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/tutorial-availability-sets

8.2   Configure monitoring, networking, storage, and virtual machine size
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/monitor

8.3   Deploy and configure scale sets
https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/overview

Section 9: Automate deployment of VMs

9.1   Modify Azure Resource Manager (ARM) template
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates

9.2   Configure location of new VMs
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-portal

9.3   Configure VHD template
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/create-vm-specialized

9.4   Deploy from template
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-deploy

9.5   Save a deployment as an ARM template
https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-export-template

9.6   Deploy Windows and Linux VMs
https://docs.microsoft.com/en-us/azure/virtual-machines/linux/quick-create-portal

Section 10: Manage Azure VM

10.1   Add data discs
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/attach-managed-disk-portal

10.2   Add network interfaces

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-network-interface-vm

10.3   Automate configuration management by using PowerShell Desired State Configuration (DSC) and VM Agent by using custom script extensions
https://docs.microsoft.com/en-us/azure/virtual-machines/extensions/dsc-template

10.4   Manage VM sizes
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sizes

10.5   Move VMs from one resource group to another
https://docs.microsoft.com/en-us/azure/virtual-machines/windows/move-vm

10.6   Redeploy VMs
https://docs.microsoft.com/en-us/azure/virtual-machines/troubleshooting/redeploy-to-new-node-windows

Section 11: Manage VM backups

11.1   Configure VM backup
https://docs.microsoft.com/en-us/azure/backup/backup-azure-vms-first-look-arm

11.2   Define backup policies
https://azure.microsoft.com/en-us/updates/azure-vm-backup-policy-management/

11.3   Implement backup policies
https://docs.microsoft.com/en-us/azure/backup/backup-introduction-to-azure-backup

11.4   Perform VM restore
https://azure.microsoft.com/en-us/blog/simplified-restore-experience-for-azure-virtual-machines/

Configure and manage virtual networks (20-25%)

Section 12: Create connectivity between virtual networks (also AZ-102)

12.1   Create and configure VNET peering
https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-peering-overview

12.2   Create and configure VNET to VNET
https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-vnet-vnet-rm-ps

12.3   Verify virtual network connectivity
https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-faq

12.4   Create virtual network gateway
https://blogs.technet.microsoft.com/canitpro/2017/06/28/step-by-step-configuring-a-site-to-site-vpn-gateway-between-azure-and-on-premise/

Section 13: Implement and manage virtual networking

13.1   Configure private and public IP addresses, network routes, network interface, subnets, and virtual network
https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-network-interface-addresses

Section 14: Configure name resolution (also AZ-102)

14.1   Configure Azure DNS
https://docs.microsoft.com/en-us/azure/dns/dns-getstarted-portal

14.2   Configure custom DNS settings
https://docs.microsoft.com/en-us/azure/app-service/app-service-web-tutorial-custom-domain

14.3   Configure DNS zones
https://docs.microsoft.com/en-us/azure/dns/dns-operations-dnszones-portal

Section 15: Create and configure a Network Security Group (NSG)

15.1   Create security rules
https://docs.microsoft.com/en-us/azure/virtual-network/tutorial-filter-network-traffic

15.2   Associate NSG to a subnet or network interface
https://docs.microsoft.com/en-us/azure/virtual-network/security-overview

15.3   Identify required Network Security Group ports
https://blogs.msdn.microsoft.com/igorpag/2016/05/14/azure-network-security-groups-nsg-best-practices-and-lessons-learned/

15.4   Evaluate effective security rules
https://docs.microsoft.com/en-us/rest/api/virtualnetwork/securityrules

Manage identities (15-20%)

Section 16: Manage Azure Active Directory (AD) (also AZ-102)

16.1   Add custom domains
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-custom-domain

16.2   Configure Azure AD Identity Protection, Azure AD Join, and Enterprise State Roaming
https://docs.microsoft.com/en-us/azure/active-directory/devices/enterprise-state-roaming-enable

16.3   Configure self-service password reset
https://docs.microsoft.com/en-us/azure/active-directory/authentication/quickstart-sspr

16.4   Implement conditional access policies
https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/overview

16.5   Manage multiple directories
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-administer

16.6   Perform an access review
https://docs.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview

Section 17: Manage Azure AD objects (users, groups, and devices)

17.1   Create users and groups
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-groups-create-azure-portal

17.2   Manage user and group properties
https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/groups-dynamic-membership

17.3   Manage device settings
https://docs.microsoft.com/en-us/azure/active-directory/devices/device-management-azure-portal

17.4   Perform Azure AD bulk user updates
https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-users-azure-active-directory

Section 18: Implement and manage hybrid identities (also AZ-102)

18.1   Install and configure Azure AD Connect
https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-install-express

18.2   Configure federation and single sign-on
https://docs.microsoft.com/en-us/azure/active-directory/manage-apps/configure-single-sign-on-non-gallery-applications

18.3   Manage Azure AD Connect
https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-install-custom

18.4   Manage password sync and writeback
https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-sspr-writeback