**Post Assessment ITIL**

**ITIL (Information Technology Infrastructure Library)**

1. What is the main goal of ITIL?  
   a. To enforce strict compliance in IT organizations  
   b. To align IT services with business needs  
   c. To maximize the use of cloud technologies  
   d. To reduce IT staff requirements
2. Which ITIL process ensures services meet agreed performance levels?  
   a. Service Desk  
   b. Problem Management  
   c. Service Level Management  
   d. Change Management
3. In ITIL, which is NOT part of the Service Lifecycle?  
   a. Service Strategy  
   b. Service Testing  
   c. Service Operation  
   d. Service Design
4. The RACI matrix in ITIL is used for:  
   a. Process documentation  
   b. Role assignment  
   c. Financial management  
   d. Risk analysis
5. The **Change Advisory Board (CAB)** is responsible for:  
   a. Testing changes before deployment  
   b. Approving or rejecting changes  
   c. Monitoring service levels  
   d. Creating IT policies

**Cloud Services**

1. Which of the following is an example of **IaaS**?  
   a. Microsoft Office 365  
   b. Amazon EC2  
   c. Google Docs  
   d. Salesforce CRM  
   **Answer**: b
2. What does **SaaS** stand for?  
   a. System as a Service  
   b. Software as a Service  
   c. Security as a Service  
   d. Storage as a Service
3. What is the benefit of a hybrid cloud model?  
   a. Unlimited storage  
   b. Mix of public and private cloud benefits  
   c. Complete reliance on private infrastructure  
   d. Reduced need for virtualization
4. Which of these is a key characteristic of cloud computing?  
   a. High latency  
   b. On-demand self-service  
   c. Fixed storage capacity  
   d. Manual resource scaling
5. **Multi-tenancy** in cloud services refers to:  
   a. Dedicated servers for each client  
   b. Multiple users sharing resources securely  
   c. Only private cloud usage  
   d. Multiple cloud providers working together

**Virtualization**

1. Which technology allows multiple operating systems to run on a single hardware platform?  
   a. Containerization  
   b. Virtualization  
   c. Server clustering  
   d. Load balancing
2. What is a **Type-1 Hypervisor**?  
   a. Runs on bare-metal hardware  
   b. Requires an operating system  
   c. Manages Docker containers  
   d. A storage management tool
3. Which of the following is a virtualization platform?  
   a. Kubernetes  
   b. VMware vSphere  
   c. Terraform  
   d. Ansible
4. What is **vMotion** in VMware?  
   a. A storage replication tool  
   b. A live migration feature  
   c. A backup solution  
   d. A virtual machine template
5. Which of these is a benefit of virtualization?  
   a. Increased hardware dependency  
   b. Reduced resource utilization  
   c. Easier disaster recovery  
   d. Limited scalability

**Ansible**

1. Ansible uses which protocol for communication?  
   a. SSH  
   b. HTTPS  
   c. FTP  
   d. SNMP
2. In Ansible, **playbooks** are written in:  
   a. JSON  
   b. YAML  
   c. XML  
   d. CSV
3. Which of the following is NOT a component of Ansible?  
   a. Inventory  
   b. Tasks  
   c. Pods  
   d. Modules
4. What does **idempotency** in Ansible mean?  
   a. Tasks execute only once  
   b. Tasks produce consistent results  
   c. Tasks require human intervention  
   d. Tasks cannot be repeated
5. Which command runs an Ansible playbook?  
   a. ansible-pb  
   b. ansible-playbook  
   c. ansible-runbook  
   d. playbook-ansible

**Docker**

1. A Docker **image** is:  
   a. A running container  
   b. A template for containers  
   c. A physical server  
   d. A cluster manager
2. What is the default Docker container orchestration tool?  
   a. Kubernetes  
   b. Docker Swarm  
   c. Ansible  
   d. Puppet
3. Docker containers are isolated using:  
   a. Virtualization  
   b. OS-level processes  
   c. Hypervisors  
   d. Network segmentation
4. The command to list running Docker containers is:  
   a. docker ps  
   b. docker list  
   c. docker containers  
   d. docker show
5. The file used to define a multi-container Docker application is:  
   a. Dockerfile  
   b. docker-compose.yml  
   c. container-config.yml  
   d. compose-docker.yaml

**Terraform**

1. Terraform is primarily used for:  
   a. Managing containers  
   b. Infrastructure automation  
   c. Application monitoring  
   d. Security auditing
2. Terraform code is written in:  
   a. YAML  
   b. Python  
   c. HCL (HashiCorp Configuration Language)  
   d. JSON
3. Terraform's command to create or update resources is:  
   a. terraform build  
   b. terraform deploy  
   c. terraform apply  
   d. terraform plan
4. What is a **Terraform state file**?  
   a. A backup of resource configurations  
   b. A record of current infrastructure  
   c. A YAML configuration file  
   d. A monitoring report
5. **Providers** in Terraform are:  
   a. Predefined infrastructure templates  
   b. Plugins to interact with cloud platforms  
   c. Configuration management tools  
   d. User access control mechanisms

**Kubernetes**

1. In Kubernetes, a **pod** is:  
   a. A virtual machine  
   b. A group of one or more containers  
   c. A monitoring tool  
   d. A storage unit
2. What is the role of the **Kubelet**?  
   a. Scheduling containers  
   b. Ensuring container health on nodes  
   c. Managing storage volumes  
   d. Monitoring network traffic
3. The **etcd** component in Kubernetes is used for:  
   a. Networking  
   b. Storage  
   c. Cluster configuration data  
   d. Logging
4. Kubernetes' command-line interface is:  
   a. kubectl  
   b. kubecli  
   c. kctl  
   d. docker-kube
5. A **Kubernetes service** is used to:  
   a. Store container logs  
   b. Expose pods to external or internal traffic  
   c. Manage stateful applications  
   d. Configure storage

**Storage**

1. Which of the following is a block storage service?  
   a. Amazon S3  
   b. Amazon EBS  
   c. Google Drive  
   d. Dropbox
2. RAID stands for:  
   a. Redundant Array of Independent Disks  
   b. Random Access Independent Data  
   c. Reconfigurable Array of Internal Drives  
   d. Remote Access Infrastructure Device
3. NAS stands for:  
   a. Network Attached Storage  
   b. Non-Accessible Storage  
   c. Network Access System  
   d. Nonvolatile Array Storage
4. Which is a distributed file storage system?  
   a. Ceph  
   b. MySQL  
   c. Redis  
   d. Kafka
5. An example of object storage is:  
   a. AWS S3  
   b. Amazon RDS  
   c. VMware vSAN  
   d. Kubernetes Volumes