**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