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. <mark>To align IT services with business needs</mark>
   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. <mark>Service Level Management</mark>
   d. Change Management

3. In ITIL, which is NOT part of the Service Lifecycle?
   a. Service Strategy
   b. <mark>Service Testing</mark>
   c. Service Operation
   d. Service Design

4. The RACI matrix in ITIL is used for:
   a. Process documentation
   b. <mark>Role assignment</mark>
   c. Financial management
   d. Risk analysis

5. The **Change Advisory Board (CAB)** is responsible for:
   a. Testing changes before deployment
   b. <mark>Approving or rejecting changes</mark>
   c. Monitoring service levels
   d. Creating IT policies

Cloud Services

6. Which of the following is an example of **IaaS**?
   a. Microsoft Office 365
   b. Amazon EC2
   c. Google Docs
   d. Salesforce CRM
   Answer: b

7. 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

8. 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

9. 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

10. **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

11. Which technology allows multiple operating systems to run on a single hardware platform?
    a. Containerization
    b. Virtualization
    c. Server clustering
    d. Load balancing

12. 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

13. Which of the following is a virtualization platform?
    a. Kubernetes
    b. VMware vSphere
    c. Terraform
    d. Ansible

14. What is **vMotion** in VMware?
    a. A storage replication tool
    b. A live migration feature
    c. A backup solution
    d. A virtual machine template

15. Which of these is a benefit of virtualization?
    a. Increased hardware dependency
    b. Reduced resource utilization
    c. Easier disaster recovery
    d. Limited scalability

Ansible

16. Ansible uses which protocol for communication?
    a. SSH
    b. HTTPS
    c. FTP
    d. SNMP

17. In Ansible, **playbooks** are written in:
    a. JSON
    b. YAML
    c. XML
    d. CSV

18. Which of the following is NOT a component of Ansible?
    a. Inventory
    b. Tasks
    c. Pods
    d. Modules

19. 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

20. Which command runs an Ansible playbook?
    a. ansible-pb
    b. ansible-playbook
    c. ansible-runbook
    d. playbook-ansible

Docker

21. A Docker **image** is:
    a. A running container
    b. A template for containers
    c. A physical server
    d. A cluster manager

22. What is the default Docker container orchestration tool?
    a. Kubernetes
    b. Docker Swarm
    c. Ansible
    d. Puppet

23. Docker containers are isolated using:
    a. Virtualization
    b. OS-level processes
    c. Hypervisors
    d. Network segmentation

24. The command to list running Docker containers is:
    a. docker ps
    b. docker list
    c. docker containers
    d. docker show

25. 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

26. Terraform is primarily used for:
    a. Managing containers
    b. Infrastructure automation
    c. Application monitoring
    d. Security auditing

27. Terraform code is written in:
    a. YAML
    b. Python
    c. HCL (HashiCorp Configuration Language)
    d. JSON

28. Terraform's command to create or update resources is:
    a. terraform build
    b. terraform deploy
    c. terraform apply
    d. terraform plan

29. 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

30. **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

31. 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

32. What is the role of the **Kubelet**?
    a. Scheduling containers
    b. Ensuring container health on nodes
    c. Managing storage volumes
    d. Monitoring network traffic

33. The **etcd** component in Kubernetes is used for:
    a. Networking
    b. Storage
    c. Cluster configuration data
    d. Logging

34. Kubernetes' command-line interface is:
    a. kubectl
    b. kubecli
    c. kctl
    d. docker-kube

35. 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

36. Which of the following is a block storage service?
    a. Amazon S3
    b. Amazon EBS
    c. Google Drive
    d. Dropbox

37. 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

38. NAS stands for:
    a. Network Attached Storage
    b. Non-Accessible Storage
    c. Network Access System
    d. Nonvolatile Array Storage

39. Which is a distributed file storage system?
    a. Ceph
    b. MySQL
    c. Redis
    d. Kafka

40. An example of object storage is:
    a. AWS S3
    b. Amazon RDS
    c. VMware vSAN
    d. Kubernetes Volumes