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**P101/1758g/21**

**CAT TWO**

**CLOUD COMPUTING**

**Question One**

Demystify each of the following common myths about cloud computing. (2 marks)

1. Cloud computing requires you to expose your data to the outside world.

Myth: Many believe that using cloud computing means all data must be accessible to external entities.

1. Cloud computing requires virtualization.

Myth: Some assume that cloud computing depends solely on virtualization technologies like virtual machines (VMs).

**Question Two**

Discuss the Cloud Service Life Cycle. (8mks)

**1. Service Strategy and Design**

* **Purpose:** Define the purpose, objectives, and target users of the cloud service.
* **Key Activities:**
  + Identify business requirements.
  + Conduct market research and feasibility analysis.
  + Plan service features, architecture, and delivery models (e.g., SaaS, PaaS, IaaS).
  + Define SLAs (Service Level Agreements) and security protocols.

**2. Service Development and Deployment**

* **Purpose:** Build and launch the cloud service based on the design specifications.
* **Key Activities:**
  + Develop the infrastructure, application, or platform.
  + Test the service for functionality, performance, and security.
  + Deploy the service to production environments, ensuring accessibility to users.

**3. Service Operation and Management**

* **Purpose:** Ensure smooth and reliable operation of the cloud service.
* **Key Activities:**
  + Monitor service performance and uptime.
  + Manage user requests, incidents, and escalations.
  + Optimize resource utilization to control costs.
  + Perform regular updates and patches to address bugs and vulnerabilities.

**4. Service Optimization**

* **Purpose:** Continuously improve the service to meet evolving user needs.
* **Key Activities:**
  + Analyze feedback from users and performance metrics.
  + Upgrade infrastructure or features to improve scalability, reliability, and user experience.
  + Implement cost-saving measures without compromising quality.

**5. Service Retirement**

* **Purpose:** Decommission a service that is no longer needed or has been replaced.
* **Key Activities:**
  + Notify users and stakeholders of the retirement plan.
  + Migrate data or users to alternative solutions.
  + Safely dispose of resources and data in compliance with regulations.
  + Document the retirement process and lessons learned for future services.