

Name _____

Exploring the Cloud: How Cloud Computing Transforms the Digital World

Short Answer Key

1. (Sample answer) Scalability in cloud computing refers to the ability to easily adjust computing resources to meet changing demands. This is advantageous because it allows businesses to efficiently handle fluctuations in workloads. For example, during the holiday season, an online retailer can scale up its server capacity to accommodate increased website traffic.
2. (Sample answer) Data centers in cloud computing are large facilities equipped with servers and storage devices where cloud providers host and manage computing resources. They are essential for delivering cloud services as they house the hardware required to process and store data remotely. The geographic distribution of data centers ensures redundancy and reliability.
3. (Sample answer) Cloud computing's accessibility feature can benefit remote work by allowing employees to access company data and applications from anywhere with an internet connection. For instance, a sales representative can access customer information and sales reports while on a business trip, increasing productivity and efficiency.
4. (Sample answer) Infrastructure as a Service (IaaS) provides virtualized computing resources like virtual machines and storage, allowing users to manage their applications and data. Software as a Service (SaaS) delivers software applications over the internet, eliminating the need for local installations. The key difference is that IaaS offers infrastructure components, while SaaS offers complete software applications.
5. (Sample answer) Cloud computing contributes to cost-efficiency for businesses by eliminating the need to invest in and maintain expensive hardware and infrastructure. Instead, organizations pay only for the resources they use on a pay-as-you-go basis, reducing upfront capital expenses and ongoing maintenance costs.

