LABORATORY PRACTICE-II (CLOUD COMPUTING)

ORAL QUESTIONS FOR FINAL SUBMISSION

1. What is Cloud Computing with example?
   cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence—over the Internet ("the cloud") to offer faster innovation, flexible resources, and economies of scale.
   Eg. AWS, Azure
2. Who is the father of cloud computing?
   J.C.R.Licklider
3. List down the basic characteristics of cloud computing?
   on-demand self-service, broad network access, resource pooling, rapid elasticity, and measured service
4. What do you mean by Vertical and Horizontal scaling in Cloud Computing?
   horizontal scaling means scaling by adding more machines to your pool of resources (also described as "scaling out"), whereas vertical scaling refers to scaling by adding more power (e.g. CPU, RAM) to an existing machine (also described as "scaling up").
5. What are the services provided by Cloud Computing?
   databases, software, analytics, servers, storage, networking, and intelligence.
6. What are different model in Deployment in Cloud Computing?
   public, private, community, and hybrid.
7. Mention the platform which are used for Large Scale Cloud Computing?
   Azure, AWS
8. Mention the name of some large cloud providers and databases?
9. Explain the difference between cloud and traditional datacenters?
10. What are the different components required in cloud computing?
    A frontend platform. A backend platform. A cloud-based delivery model. A network (internet, intranet, or intercloud)
11. What are the different platforms of cloud architecture?
    public, private and hybrid
12. What is a cloud service?
    Cloud services are infrastructure, platforms, or software that are hosted by third-party providers and made available to users through the internet.
13. List down the basic clouds in cloud computing?
    public, private, community, and hybrid
14. What are some issues with Cloud Computing?
15. data loss or theft.
16. data leakage.
17. account or service hijacking.
18. insecure interfaces and APIs.
19. denial of service attacks.
20. technology vulnerabilities, especially in shared environments.

21. Mention the services that are provided by Window Azure Operating System?

    It provides a broad range of cloud services, including compute, analytics, storage and networking.
22. What is Cloud Computing Architecture?

23. What are the Services provided by AWS?

i. Software as a Service (SaaS) – It is also known as **cloud application services**. Mostly, SaaS applications run directly through the web browser means we do not require to download and install these applications. Some important example of SaaS is given below –

Example: Google Apps, Salesforce Dropbox, Slack, Hubspot, Cisco WebEx.

ii. Platform as a Service (PaaS) – It is also known as **cloud platform services**. It is quite similar to SaaS, but the difference is that PaaS provides a platform for software creation, but using SaaS, we can access software over the internet without the need of any platform.

Example: Windows Azure, Force.com, Magento Commerce Cloud, OpenShift.

iii. Infrastructure as a Service (IaaS) – It is also known as **cloud infrastructure services**. It is responsible for managing applications data, middleware, and runtime environments.

Example: Amazon Web Services (AWS) EC2, Google Compute Engine (GCE), Cisco Metapod.

24. What are the Services provided by Microsoft?
25. What is Virtualization?

    Virtualization is a process that allows a computer to share its hardware resources with multiple digitally separated environments. Each virtualized environment runs within its allocated resources, such as memory, processing power, and storage.

26. What is an EC2 instance?

    An Amazon EC2 instance is a virtual server in Amazon's Elastic Compute Cloud (EC2) for running applications on the Amazon Web Services (AWS) infrastructure.
27. What is AMI in EC2?

    An Amazon Machine Image (AMI) is a master image for the creation of virtual servers -- known as EC2 instances -- in the Amazon Web Services (AWS) environment. The machine images are like templates that are configured with an operating system and other software that determine the user's operating environment.
28. How to launch an on-demand EC2 instance in AWS?

29. What is Google App Engine?

    App Engine is a fully managed, serverless platform for developing and hosting web applications at scale

30. What are advantages of Google App Engine?
    Easy to set up and use
    Pay per use pricing
    Scalability
    Security
31. What are the steps to install and configure Google App Engine?
32. What is Apex?

    Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in conjunction with calls to the Lightning Platform API.
33. What are the Features of Apex as language?

    Integrated. Apex has built in support for DML operations like INSERT, UPDATE, DELETE and also DML Exception handling. ...
    Java like syntax and easy to use. ...
    Strongly Integrated With Data. ...
    Strongly Typed. ...
    Multitenant Environment. ...
    Upgrades Automatically. ...
    Easy Testing. ...

34. What are the application of Apex?

    Oracle **APEX** is the world's most popular enterprise low-code **application** platform that enables you to build scalable, secure apps, with world-class features
35. List some Apex Code Development Tools?

    Developer Console.
    Salesforce Extensions for Visual Studio Code.
    Code Editor in the Salesforce User Interface.

36. What are the steps to create application using Apex Programming Language?
37. What is Salesforce.com Inc.?

    Salesforce is a cloud-based Customer Relationship Management (CRM) platform that enables businesses to manage customer data, sales operations, and marketing campaigns.
38. What is Lightning Platform?

    Salesforce's Lightning Platform provides the tools to automate your business processes, integrate with external applications, and deliver completely custom user interfaces when necessary
39. How to create Custom Application using Salesforce Classic?
40. What is the difference between custom application and console application in sales force?

    A custom app in salesforce is a collection of tabs, objects, etc. that function together to solve a particular problem. Console apps in Salesforce are a tab-based workspace suitable for fast-paced work environments.
41. What are the steps to create custom application using salesforce?
42. What is hypervisor in Cloud Computing?

    A Cloud Hypervisor is software that enables the sharing of cloud provider's physical compute and memory resources across multiple virtual machines (VMs).

43. Explain Load Balancing in Cloud Computing.

    Load balancing is the method of distributing network traffic equally across a pool of resources that support an application

44. List the open-source cloud computing platform databases?

    Microsoft Azure SQL **database** · Oracle **database** · IBM Db2 on **cloud** · Google **Cloud** SQL ...

45. What are recent trends of Cloud Computing?

    AI and ML, Kubernetes, Multi and Hybrid cloud solutions, IoT, Cloud Security

46. Applications of Cloud Computing.

    Online Data Storage. Cloud Computing allows storage and access to data like files, images, audio, and videos on the cloud storage. ...

    Backup and Recovery. ...

    Big Data Analysis. ...

    Testing and Development. ...

    Antivirus Applications. ...

    E-commerce Application. ...

    Cloud Computing in Education.