Question Bank

📖 Chapter 1: Introduction to Cloud Computing and AWS

1. Define cloud computing and explain its core characteristics.
2. What is meant by on-demand delivery of IT resources?
3. Explain the pay-as-you-go pricing model in cloud computing.
4. Differentiate between Public, Private, and Hybrid Clouds with examples.
5. List and explain the three Cloud Service Models: IaaS, PaaS, and SaaS.
6. Give AWS service examples for each cloud service model.
7. Briefly describe the history of AWS.
8. What are AWS Regions and Availability Zones?
9. List four core AWS services and describe their purposes.
10. What is IoT? How is it different from traditional computing?
11. Give three real-world use cases of IoT applications.
12. Mention two societal benefits of IoT technology.
13. Discuss the privacy concerns associated with IoT.
14. What security challenges does IoT bring?
15. Name two AWS services used in IoT integration and their roles.

📖 Chapter 2: Networking Services

1. Define the terms IP, DNS, Subnet, and NAT.
2. What is a Virtual Private Cloud (VPC)? Why is it important?
3. List the core components of a VPC.
4. Explain the difference between public and private subnets.
5. How do route tables work within a VPC?
6. What is the role of Security Groups in AWS?
7. Differentiate between Security Groups and NACLs.

8. How are inbound and outbound rules configured in Security Groups?
9. What is AWS Route 53? Mention its functions.
10. Explain domain registration using Route 53.
11. Describe routing policies in Route 53.
12. What is AWS CloudFront? Why is it used?
13. Define edge locations in the context of CloudFront.
14. Explain how caching improves content delivery.
15. Briefly outline the steps to build a VPC and launch an EC2 instance inside it.

📖 Chapter 3: Compute Services

1. What is Infrastructure as a Service (IaaS)? Give an AWS example.
2. Describe the process to launch, configure, and terminate an EC2 instance.
3. List and explain types of Elastic Load Balancer (ELB) in AWS.
4. Give one use case for each type of ELB.
5. What is Auto Scaling and why is it important?
6. Explain Auto Scaling policies and scaling plans.
7. Define serverless computing with an example.
8. What is AWS Lambda and how does it work?
9. Describe the event-driven model in AWS Lambda.
10. List three use cases of AWS Lambda.
11. What is AWS Elastic Beanstalk? Why is it considered a PaaS?
12. Explain the steps to deploy an application using Elastic Beanstalk.
13. How does Auto Scaling integrate with Elastic Load Balancing?
14. What are the benefits of serverless architectures?
15. Differentiate between IaaS and PaaS with AWS services as examples.