# Section I: Design Resilient Architectures

* 1. Choose reliable/resilient storage
  2. Determine how to design decoupling mechanisms using AWS services
  3. Determine how to design multi-tier architecture
  4. Determine how to design high availability and fault tolerant architectures

# Section II: Define Performant Architectures

2.1 Choose performant databases

2.2 Apply caching to improve performance

2.3 Design solutions for elasticity and scalability

# Section III: Specify Secure Applications and Architectures

3.1 Determine how to secure application tiers

3.2 Determine how to secure data

3.3 Define the networking infrastructure for a single VPC application

# Section IV: Design Cost-Optimized Architecture

4.1 Determine how to design cost-optimized storage

4.2 Determine how to design cost-optimized compute

# Section V: Define Operationally Excellent Architectures

5.1 Choose design features in solutions that enable operational excellence

\*\* Use the AWS console and play with various options – hands on knowledge is important to pass the examination! \*\*

AWS foundational services:

* Regions, AZs
* VPCs
* EC2
* ELB
* AWS Auto Scaling
* Storage
* Networking
* Databases
* IAM
* Security

For other services such as ML, application services, etc. know the basic concept and when to pick a given service.

Aurora vs RDS

Chapter 1: AWS and Cloud Computing Overview

* On demand
* Accessible from the Internet
* Pay as you go

List of each service with rephrased one line description