# MODULE 3 :- Global infrastructure overview

I AWS Global Infrastructure -

AWS Regions →

- Allows data Replication across the region
- communication

→ Availability zones consist of multiple data centres, designed for fault isolation, separated from other availability zones, has their own power infrastructure.

- ~~Edge location~~.

Points of presence → 187 points of presence with 176 edge locations and 11 Regional edge caches.

AWS infrastructure features →

→ Elasticity and scalability

→ fault - tolerance

→ High availability

II Foundational Services →
Most widely used services →

(1) AWS storage services →
↳ Consist of (S3)
↳ Amazon EBS
↳ Amazon EFS (uses NFS)
↳ Amazon Simple Storage Services Glacier

(2) AWS Compute Services →
(1) AWS EC2
(2) " " Auto Scaling
(3) AWS ECS (elastic container service)
(4) ECR (Container registry)
(5) Amazon EKS
↳ Kubernetes
(6) AWS Elastic Beanstalk.
(7) " Lambda
(8) " Fargate

(3) AWS Database Services
(1) Amazon Relational Database Services
(2) " Aurora
(3) " Redshift
(4) " DynamoDB.

(4) AWS Networking & content delivering services
(1) Amazon VPC, (2) Elastic load Balancing,
(3) " Cloud Front (4) AWS Transit Gateway
(5) " Route 53 (6) AWS Direct Connect (7) AWS VPN

(5) AWS security, identity and compliance services

- AWS Identity & Access management
- AWS Organizations
- Amazon Incognito
- AWS artifact
- AWS shield

(6) Cost Management

- AWS cost and usage report
- AWS Budget
- AWS cost explorer

(7) AWS management & governance services

- AWS management console
- " config
- AWS command line interface. etc.
- AWS Trusted advisor

Q) AWS cloudfront uses _____ for low latency delivery
Ans:- Edge locations.

Q) Fault tolerant means → the infrastructure ~~can~~ has built-in components redundancy.

Q) Edge locations are not only located in the same general areas as regions.