What are the differences between NAT Gateway vs. NAT Instance

Feature	NAT Gateway	NAT Instance
Management	Fully AWS-managed	User-managed EC2 instance
Availability	High (AWS infrastructure)	Single point of failure
Scaling	Auto-scales up to 45 Gbps	Manual scaling required
Performance	Up to 45 Gbps bandwidth	Limited by instance type
Cost	Higher (~$45/month + data fees)	Lower (EC2 pricing only)
Security Groups	Cannot assign	Can assign security groups
NACLs	Supports NACLs	Supports NACLs
SSH Access	Not available	Full SSH access
Customization	No customization	Full configuration control
Port Forwarding	Not supported	Supported
Use Case	Production, high traffic	Cost-sensitive, custom needs

Recommendation:

- **Choose NAT Gateway** for production environments with high availability needs
- **Choose NAT Instance** for cost optimization or when custom configuration is required

Q1. Which of the following is a key difference between a NAT Gateway and a NAT Instance in AWS?

A. NAT Gateway supports security groups, while NAT Instance does not
B. NAT Gateway is fully managed by AWS, while NAT Instance requires manual setup and maintenance
C. NAT Instance is more scalable than NAT Gateway
D. NAT Gateway allows inbound SSH connections by default

✅ **Correct Answer:** B

Q2. Which option is **true** regarding high availability?

A. NAT Gateway provides automatic high availability within an Availability Zone

B. NAT Instance is automatically distributed across multiple AZs

C. Both NAT Gateway and NAT Instance offer built-in high availability

D. Neither of them supports high availability

✅ **Correct Answer:** A