**Assignment Dated: 13.03.22**

1. **Transit Gateway**

A transit gateway is a network transit hub that you can use to interconnect your virtual private clouds (VPCs) and on-premises networks. As your cloud infrastructure expands globally, inter-Region peering connects transit gateways together using the AWS Global Infrastructure.

1. **Customer gateway**

A customer gateway is a resource that you create in AWS that represents the customer gateway device in your on-premises network. When you create a customer gateway, you provide information about your device to AWS.

1. **VPN Gateway**

On the AWS side of the Site-to-Site VPN connection, a virtual private gateway or transit gateway provides two VPN endpoints (tunnels) for automatic failover. You configure your customer gateway device on the remote side of the Site-to-Site VPN connection.

1. **Site to Site VPN Connection**

AWS Site-to-Site VPN is a fully-managed service that creates a secure connection between your data center or branch office and your AWS resources using IP Security (IPSec) tunnels.

1. **Client VPN Endpoint.**

AWS Client VPN is a managed client-based VPN service that enables you to securely access your AWS resources and resources in your on-premises network. With Client VPN, you can access your resources from any location using an OpenVPN-based VPN client.

1. **VCP Endpoint**

A VPC endpoint enables connections between a virtual private cloud (VPC) and supported services, without requiring that you use an internet gateway, NAT device, VPN connection, or AWS Direct Connect connection.

Three Type of VPC Endpoints are

1. Interface Endpoints.
2. Gateway Load Balance Endpoint.
3. Gateway Endpoints.
4. **Stateless and Stateful in Security Group**

These are stateless, meaning any change applied to an incoming rule isn't automatically applied to an outgoing rule

These are stateful, which means any changes which are applied to an incoming rule is automatically applied to a rule which is outgoing.