Q1.

1. Create VPC with custom subnet:
   Under Subnet-> Subnet creation mode-Custom subnets
   Single subnet with range 192.168.1.0/24
   region us-central-1

2. Launch bastion host instance:
   region us-central1
   zone us-central1-c
   -->network-tag bastion-host
   Edit the existing network interface:
   Network should be the created VPC
   Subnetwork should be the created subnet

3. Launch private instance:
   region us-central1
   zone us-central1-c
   -->network-tag allow-ssh-private
   Network should be the created VPC
   Subnetwork should be the created subnet
   External IP None

4. Create firewall for bastion host:
   Network should be the created VPC
   Direction INGRESS
   priority 1000
   action ALLOW
   rules tcp:22
   source-ranges 103.214.131.114/32 (Allows only ssh from your terminal!)
   -->target-tags bastion-host (Important)

5. Create firewall for private instance:
   Network should be the VPC just created
   Direction INGRESS
   priority 1000
   action ALLOW
   rules tcp:22
   -->source-tags bastion-host (Important)
   -->target-tags allow-ssh-private (Important)

6. On local terminal:
   local-terminal:~$ gcloud beta compute --project "pe-training" ssh --zone "us-central1-c" "<bastion-instance-name>"

On bastion host:
   bastion-host:~$ gcloud beta compute --project "pe-training" ssh --zone "us-central1-c" "<private-instance-name>" --internal-ip

If Error comes Authenticate yourself using --> $ gcloud auth login

Check for internet access:
private-intance:~$ curl example.com (Should timeout)

7.Create a NAT configuration using Cloud Router

Go to the Cloud NAT page in the Google Cloud Platform Console.
Go to the Cloud NAT page
Click Get started or Create NAT gateway.
Enter a Gateway name.
Set the VPC network to above VPC.
Set the Region to us-central1.
Under Cloud Router, select Create new router.
Enter a Name for NAT router.
Click Create.

8. Connect to the Internet again

private-intance:~$ curl example.com (Should show HTML DOM)