Configure the network with the following constraints. You may modify physical network and add/modify network devices to maintain the network constraints.

1. RU Zone 1 can only communicate with both RU Restricted Zone and RU Public Zone computers. The computers should have private fixed IP address.
2. RU Zone 2 computers do not have any communication restriction. The DHCP server of RU Zone 2 provides the IP configuration for this zone.
3. RU Private Zone can only be accessible from RU Public Zone, RU Zone 1, and RU Zone 2. All the computers of RU Private Zone should have private IP address. In this zone
   1. ftp.ru.ac.bd server is an FTP server for the RU organization. Test the FTP server by uploading and downloading files to and from the FTP server.
   2. applications.ru.ac.bd server is a private web server for the RU organization. Test this server by accessing a static html page hosted at this server.
4. RU Public Zone can only be accessible from anywhere. RU Public Zone, RU Zone 1, and RU Zone 2. All the computers of RU Public Zone should have public fixed IP address. Here
   1. dns.ru.ac.bd is a DNS server for the RU organization
      1. Contains the IP address of all name server of the RU organization
      2. It will communicate with dns.ac.bd web server to get the IP address of external server.
   2. mail.ru.ac.bd is a Mail server for the RU organization. Creates at least tree mail user at the server. Test the email server by sending and receiving emails using the mail server.
   3. www.ru.ac.bd is a public web server for the RU organization
   4. External Server Zone contains the public web servers (www.ru.ac.bd) with public IP address. Test this server by accessing a static html page hosted at this server.
5. External User Zone computers can communicate with any computers accept the computers and servers of the RU Private Zone and RU Zone 1.
6. Both dns.ac.bd and dns.gov.bd are DNS server with public IP address.
   1. dns.ac.bd contains the IP address of dns.ru.ac.bd and dns.gov.bd.
   2. dns.gov.bd contains the IP address of all servers with gov.bd domain along with the IP address of dns.ac.bd