Questions:

1) Give three advantages and three disadvantages for the following PKI design structures:
   - hierarchical PKI,
   - hierarchical PKI with Trust Lists,
   - mesh PKI,
   - online Certification Validation.

2) Consider the two general scenarios: local key generation on a subscriber’s network or computer; and central key generation at a certificate authority. Compare and contrast the two general methods. When might a subscriber choose to use a combined method of key generation?

2a) Given the following situation, which key generation scheme(s) would you use? Explain your answer?

   **Situation:** You are the security administrator for a small company that is planning to incorporate a public key infrastructure into its network. Your company handles a lot of sensitive information about its clients, so the data must be encrypted when they are electronically sent across the local network; furthermore, the encryption/decryption keys will be distributed to many people. The company also wants their employees to digitally sign material that they send within the local network.

   (Note: there are two types of keys you should be concerned with)