1. You are developing an overall IT strategy for your organization. Discuss when such a strategy should be based on a database approach? (10)

2. There are many similarities between the traditional way that businesses interact with each other and the B2B model. You are drafting a letter to be sent to your CEO explaining your decision to venture into a state-of-the-art e-commerce solution.

   Required:
   a. Describe differences between traditional business transactions and B2B. (06)
   b. Prepare a check list to track the security of your proposed e-commerce solution. (09)

3. What is capability maturity model? Tabulate various levels of organizational maturity within this model along with characteristics and explanation of each. (10)

4. FastHire (Pvt) Ltd., is a recruitment company. Their most valuable assets include candidate resumes and client database, without which they would lose their competitive advantage. They are a company of around 60 employees. FastHire have offices in Islamabad, Lahore and Karachi that are connected through routers and a leased line. The Information Systems (IS) environment at FastHire is centralized. There is a Windows NT4 Primary Domain Controller in Karachi that controls one Domain - FH Pak. Access to the Internet is provided through DSL in Karachi, and the firewall used is CISCO PIX. All employees have access to the internet which is well controlled through PIX. FastHire have outsourced the management of their own web site, which is also used to advertise job opportunities. The organization encourages the use of MSN Messenger and ICQ to communicate. Files are also transferred using these applications. The organization also maintains an FTP server in Lahore and allows anonymous logins to it. This allows employees from various offices to download relevant files. With this facility, employees can also access these files from home if and when they need to. Employees can also dial in to the network and access their network and e-mails through the Exchange server. The company does not currently use any other third party security product allowing authentication of employees who dial in. One of the IT analysts - Munir, has had issues with Management and has now decided to leave the company. Munir played a key role in setting up the LAN/WAN at FastHire, and was performing System Administrator activities. Another analyst has mentioned to the IT Manager that Munir is leaving to join a competitor.

   According to him it simply played some music and displayed certain images. The virus made its way to another machine but was picked up by antivirus scanner.
5. ABC Industries Ltd., a company engaged in a business of manufacture and supply of automobile components to various automobile companies in India, had been developing and adopting office automation systems, at random and in isolated pockets of its departments. The company has recently obtained three major supply contracts from International Automobile companies and the top management has felt that the time is appropriate for them to convert its existing information system into a new one and to integrate all its office activities. One of the main objectives of taking this exercise is to maintain continuity of business plans even while continuing the progress towards e-governance.

Required:

a. When the existing information system is to be converted into a new system, what are the activities involved in the conversion process? (5)
b. What are the types of operations into which the different office activities can be broadly grouped under office automation systems? (7)
c. What is meant by Business Continuity Planning? Explain the areas covered by Business Continuity. (4)

6. A firewall is software or hardware-based network security system that controls the incoming and outgoing network traffic by analyzing the data packets and determining whether they should be allowed through or not, based on a rule set. A network's firewall builds a bridge between the internal network or computer it protects, upon securing that the other network is secure and trusted, usually an external (inter)network, such as the Internet, that is not assumed to be secure and trusted.
Required:
Write a note on:
  a. Types of firewalls
  b. Firewall configurations

7. You are the IT Security Manager in a renowned manufacturing organization having an ERP system which is available throughout the globe and can be accessed by suppliers and creditors over the internet. CEO of your organization is worried about various network related threats as the information travelling over the internet is extremely confidential.

Required:
Write a brief to the CEO explaining:
  a. Subversive Threats
  b. Control over Subversive Threats