1. Explain the following terms. (20%)
   a. Group Decision Support System (GDSS)
   b. Executive Support System (ESS)
   c. eMarketplace
   d. Knowledge Engineering (KE)

2. Describe Porter’s value chain model and its relationship with Supply Chain Management (SCM). (15%)

3. Describe the evolution and attributes of computer-based information systems (CBIS). What is the relationship between the computer-based information systems and Electronic Commerce? (20%)

4. Describe the role that a data warehouse can play in Management Support Systems (MSS). Define data mining and describe its use in market research. (15%)

5. Case Study (30%)

   Fruit of the Loom’s Electronic Commerce with Its Distributors

   Fruit of the Loom (www.fruit.com) is known for its underwear clothing, but it also sells T-shirts, sweatshirts, and boxers. Unlike the underwear business, in which the company sells products directly to large retailers such as Wal-Mart, the Activewear division, which manufactures blank T-shirts, uses several dozen distributors. These sell the shirts to about 30,000 screen printers and embroiderers, who decorate the shirts and sell them to the public and/or retailers, who then market them to customers.

   This market is very competitive and complex. The distributors sell other products as well, and also T-shirts made by Fruit of the Loom’s competitors.
Therefore, the relationships between Activewear and its distributors are critical. To boost these relationships, Fruit of the Loom decided to develop and maintain an individual Web commerce site for each of their 40 key distributors on an extranet. Each site includes a color electronic catalog, inventory level information, buyers’ credit availability, and ordering forms. Both the shirt printers and the retailers enter the distributors’ sites to facilitate their own back-office operation of inventory and billing. The distributors are allowed to advertise and sell other vendors’ products on the Web site. This way Fruit of the Loom commits itself to a supporting system that benefits all channel members in a link that starts with its own site.

Fruit of the Loom hopes to gain favor with the distributors, many of whom do not have the time or money to build their Web sites. The system also includes a model that automatically suggests Fruit of the Loom’s substitute products for products not in stock. Even though building and maintaining 40 sites incurs a cost, Fruit of the Loom believes that the investment pays for itself. Fruit of the Loom uses its experience to generate profit by setting up Web sites for other companies.

Questions:

a. Why is Fruit of the Loom using distributors for T-shirts and not for underwear?

b. Why does Fruit of the Loom allow their distributors to use their Web sites for selling competitors’ products?

c. Is the electronic commerce system bringing Fruit of the Loom closer to its customers? Why or why not?

d. Fruit of the Loom did all the Web development work in-house. Is this a reasonable strategy? Why?

e. What kind of commerce is this?

f. Why is this application considered an extranet?