1. Identify and describe the 4 main types of information systems that serve the different organizational levels. （8%）

2. Briefly discuss the four competitive strategies. （8%）

3. List at least four management challenges of using Internet technology for electronic commerce and electronic business. （8%）

4. As the president of ABC Inc., Len Snider was concerned that the company information systems were not able to support the types of growth he had promised the board of directors. At this time, ABC had acceptable isolated systems for individual functions such as developing production schedules, tracking work-in-process, billing customer, and calculating cost, ···etc. In an attempt to try to understand what was missing, Len put together a task force to study the issue. Following are the recommendations of each task force member:

   - Vice-president of manufacturing: The current system for planning work in the plant and tracking work-in-process should be improved. It also cannot provide in-time information to update inventory amount, and always cause too much stock or stock shortage.
   - Vice-president of R&D: The models of products are always out-of-date, and cannot catch customers' fan. The main reason is that all design tools and techniques are antiquated. Design time could be cut in half, and we could quickly response customers' needs if only we had better and innovative design tools.
   - Vice-president of marketing: B2B customers request us to fulfill every invoice in 95% within 5 days. The current systems cannot achieve it. The current systems for making delivery commitments to customers are major drawback for sales.
   - Vice-president of finance: The current system for determining the cost of material produced is extremely inaccurate. The department of finance has to track every transaction and to punch in all data into EXCEL files again in order to generate the correct financial reports.

   Len was disappointed that these were essentially the same sort of recommendations that these executives always fought for to improve their own functional area. What seems to be missing in attitudes of these executives? What sort of systems would you expect to see in use at ABC? What sort of modern systems developments are they not likely to be considering? If you are the CIO of ABC Inc., what kind of information architecture ABC needs? Please show your architecture in graphic and explain it. （30%）

5. 請說明電子商業的十大經營法則？（20%）

6. 導入ERP時，常見的成功關鍵因素與主要失敗原因為何？（26%）