

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

**A. Short questions:**

- A-1. Using your own words to explain the meaning of the statement “Most IT problems are workflow problems, not software problems” (in a hospital or a university). (10%)
- A-2. What is VPC (cloud)? What are the advantages for the organizations to use a VPC? (10%)
- A-3. Define two dimensions of process quality and use case scenarios to explain how information systems can improve both dimensions. (10%)
- A-4. Suppose an electric vehicle manufacturer wants to create a car sharing program in a specific city.  
(a) Use Porter’s model to define the four competitive strategy alternatives. (8%)  
(b) Plot its value chain. (6%)  
(c) Explain how information systems could provide competitive advantages. (6%)

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**B、Short Answer Questions:**

B1. Briefly describe how a “block” in the blockchain of a digital cash system is created and the key technologies used to ensure the accuracy of the online ledger book and to prevent the act of double spending. (12%)

B2. Briefly introduce the issue of “semantic security” and how we can ensure it. You are encouraged to give example(s). (8 %)

B3. Discuss the issues that need to be addressed when localizing an information system. (12%)

B4. Explain how the level of complexity of a product/service can influence a company’s choice of communication modes it might use to disseminate information about the product/service online. (8%)

B5. Please fill in the blanks in the following sentences: (10%)

- (1) A knowledge management system that adopt the method of \_\_\_\_\_ can represent and organize corporate knowledge as a database of cases that can be continuously expanded and refined.
- (2) A company usually protects its sensitive corporate data by storing it in encrypted form via the use of an encryption key. In order to successfully decrypt the data in situations in which the key is lost or destroyed for some reasons, the company may use entrust a party with a copy of the key. This safety procedure is called \_\_\_\_\_.
- (3) During system initiation/definition phase of an information system development project, the assessment of \_\_\_\_\_ concerns whether the new information system would fit with an organization’s customs, culture, norms, or legal requirements.
- (4) A Facebook user may express his or her positive impression regarding the content about an organization on Facebook (e.g., likes the fan page of the organization). The fact that the user has expressed a particular feeling of an organization is an example of \_\_\_\_\_ data.
- (5) \_\_\_\_\_ is a content structure employed by public or corporate social networks that emerges from the processing of many user tags.