1. (12%) Explain why ERP software is not capable to solve 'hands-off' problem. You can use 'purchase-order' as an example to illustrate the situation.
2. (13%) For an IT department inside a company, what would be the successful mode of operations so that the IT department can obtain cooperative employee's support?
3. True/False Questions (10%)
   (a) The requirements analysis phase answers the question, "Is this system worth looking at?"
   (b) One key to successful project management is to commit to a fixed budget and schedule as early as possible and then stick to it.
   (c) A business requirements use case captures the interactions with the user in a manner that is free of technology and implementation details.
   (d) Where operational feasibility evaluates whether a system can work, cultural/political feasibility asks whether a system will work in a given organizational climate.
   (e) In a two-tiered system, the clients execute a minimum of the overall system's components. Only the user interface and some relatively stable or personal application logic need to be executed on the clients.
4. (5%) How does foreign key play a role in the join operation? What is the problem when relations are joined on attributes other than foreign key-primary key combinations?
5. (10%) Draw the DFD (Data Flow Diagram) for the processes – (1) Process invoice and payment; (2) Verify payment and process receipt.

A customer receives invoice and makes payment.

The accounting department verifies customer payment, creates and stores the receipt of customer payment in accounts receivable and sends the receipt to the customer.

The invoice, payment and receipt details are stored in the data store – accounts receivable.

6. (8%) Peer (or User) contribution is one of main characteristics of Web 2.0 paradigm.
   (a) Describe the benefits and drawbacks of peer contribution.
   (b) How to balance these positive and negative characteristics of peer contribution.
7. (8%) Web advertising is one of important revenue streams which can be generated from Internet services. Distinguish the advertising services provided by Search websites (e.g. Google AdWords) and Social Network websites (e.g. Facebook Social Ads).
8. (10%) Information technologies have become increasingly important strategic resources for companies to achieve the competitive advantage.
   (a) Describe the main characteristics and objectives of strategic information systems (SIS).
   (b) Describe Porter’s Competitive Forces Model & Value Chain Model and analyze the impact of mobile computing technology on the business strategy based on them.
9. 選擇題（共12題，請全部作答，每題2分。作答請寫清楚題號。）

(1) 在專家系統中，前向推論與後向推論(Forward reasoning and Backward reasoning)方式之比較何者是「錯誤」的？(a) 分析型的問題(診斷、決策)較適合採用前向推論 (b) 前向推論是以廣度優先(Breadth-First)為主 (c) 後向推論是由目標來驅動(goal driven) (d) 後向推論旨在求證支持結論的條件

(2) Web 2.0 的基本概念中，哪一個最具有 Collaborative intelligence 的概念：(a) Blog (b) Tag (c) wiki (d) RSS
(3) K-means 演算法，最常被應用於資料探勘方法中的：(a) 分類(Classification) (b) 趨勢分析(Trend Analysis) (c) 分群(Clustering) (d) 關聯(Association)

(4) 下列哪一項是屬於非監督式學習類神經網路：(a) BPN (b) SOM (c) Simple Recurrent Neural Networks (SRNN) (d) Time-Delay Neural Networks (TDNN)

(5) Cloud Computing 的概念與下列哪一項最相近：(a) Sensor network (b) P2P (c) Grid (d) Client-Server

(6) 被動式 RFID 標籤在應用上之特性，哪一個敘述是錯誤的：(a) 不需接觸處理即可讀取 (b) 一次僅可處理一個標籤的讀取 (c) 易受電磁波干擾 (d) 可多次新增、刪除、修改標籤中儲存的資料

(7) 一個好的供應鏈管理系統，可以改善：(a) 長鞭效應 (b) 網路外部性 (c) 長尾效應 (d) 遊際效用遞減

(8) 下列哪一項在 Service Oriented Architecture(SOA)中較不常見：(a) UDDI (b) SOAP (c) AJAX (d) WSDL

(9) 下列哪一個資訊安全之議題，與「詐騙」最相關：(a) 蠕蟲 (b) 威脅模型 (c) 關鍵基礎設施 (d) 網路釣魚

(10) 下列哪一項「最不適合」進行 business process outsourcing (BPO)？(a) Strategy Performance Alignment (b) human resources (c) call center (d) payroll

(11) 企業智慧中，共通的決策支援工具為？(a) Data Mart (b) Data Warehouse (c) Online Analytical Processing (d) Online Transaction Processing

(12) SaaS Software 的特徵，下列哪一項敘述是「錯誤的」？

(a) 是一種透過網路來存取或管理供商務使用軟體
(b) 應用上較接近一對多的服務模式，而不是一對一
(c) 由集中的地點來管理活動，而不是每個用戶的公司裡，顧客是透過 Web 連線來存取應用服務
(d) 軟體的更新需提供下載 patch 並更新