科目：計算機概論　　　　　　系組：資訊管理學系　　　年級：二

請在答案卷上作答

壹、名詞解釋（每題 6 分。只將英文翻譯中文，不列計分）

1. Solid-state drive
2. Proxy
3. ISP
4. Domain name
5. Malware
6. Firmware
7. Network attached storage (NAS)
8. Arithmetic logic unit
9. RAID
10. Virtual memory

貳、計算題（每題 10 分）

1. 請將二進制 10111101 轉為十進制表示。

2. 請將十六進制 9AC 轉為二進制表示。

參、程式設計題（20 分）

請協助撰寫販賣機找零錢程式，判斷欲找零錢 m(變數名稱)當中，以最少的銅板數來找出零錢。該販賣機所提供的銅板有 50 元、10 元、5 元及 1 元。當輸入的找零金額 m 大於 0 時，則依序顯示該找的各個銅板數(50 元、10 元、5 元及 1 元)；反之，則結束程式。

註：可選擇以 Java、C、C++、C#或 Visual Basic 語言作答

1. Most business initiatives succeed or fail on the basis of the quality of their data. Effective planning and decisions depend on systems that make data available to decision makers in usable formats on a timely basis. Explain **data governance**. (10%)

2. Sales and marketing information systems can expand the capacity to create new product, service, channels, and market opportunities that lead to new revenue streams. Data-driven, fact-based decision making increasingly relies on data that are hot impacting the business or potential customer right now. Explain '**push-through marketing**' and '**pull-through marketing**.' (12%)

3. Enterprise mashups improve operational efficiency, optimize the sales pipeline, enhance customer satisfaction, and drive profitability. Within government, mashups have positively impacted strategic areas such citizen engagement and satisfaction, financial transparency, project oversight, regulatory compliance, and legislated reporting. Discuss the benefits of the **enterprise mashups**. (18%)

4. As retailing evolved, new channels emerged that were initially thought to be separate and distinct. Describe how an '**omni-channel retailer**' is likely to be different from a traditional, single-channel retailer? (19%)

5. More recently, businesses and entrepreneurs have turned to the crowdsourcing model to raise money for business start-ups or projects. A number of crowdfunding sites have become popular in recent years. Discuss **the types of crowdfunding** and give some examples. (20%)

6. Social network analysis (SNA) is the mapping the measuring of relationships and flows between people, groups, organizations, computers, or other information or knowledge-processing entities. Online communities have received increasing attention from the business community. Lists the benefits **online communities** can be used as a platform for enterprises. (21%)