銘傳大學九十一學年度財務金融研究所碩士班招生考試
風險管理與統計資訊

第一節

財務管理 試題

可攜帶計算機!答題時謂寫出計算過程：

1. （1）(8%)請說明營運槓桿（Operating leverage）與財務槓桿（Financial leverage）之意義，並比較分析兩種槓桿之間的關聯。
   （2）（7%）請描述如何衡量營運與財務槓桿程度。

2. （10%）假設某一公司之 β 值為 1.3，市場投資組合之平均報酬率為 12%，無風險利率為 4%，且稅率為 25%。此公司之資本結構為負債與業主權益各佔 30%與 70%，其中負債的利率為 8%，則該公司的加權平均資金成本為何？

3. 必翔為醫療產品暨通路廠商，今年可配發 5 元股利。設該公司適當的折現率為 14%，
   (1) （8%）陪股利固定成長 10%，則必翔的股價應為多少？
   (2) （7%）若股利在未來一年內有 15%的年成長率，但一年後只能以 8%固定成長，則必翔的股價應為多少？

4. （1）(10%）日前 23xx 電子論壇登載：「3 月 1 日華映甲（可轉換公司債）轉換成華映（股票），目前二者價差約 10.8%，即華映甲：$36.7 與華映：40.7。若用兩筆錢下去套利，則一個禮拜可獲利 10%，在股市回檔不容易賺錢的時候，是不錯的選擇。」請評論上述觀點正確與否。

   (2)（10%）請分別說明可轉換公司債中股票的波動性、贖回條款(Call provision)、賣回條款（Put provision）與轉換價格對可轉換公司債價值之影響。

5. A company has decided to acquire the use of a machine costing $600,000. If purchased, the machine will be depreciated on a straight-line basis to a residual value of zero. The machine's estimated life is 6 years, and the company's tax rate is 25%. The company's alternative to purchasing the machine is to lease it for 6 years. A lessor has offered to lease the machine to the company for $140,000 annually, with the first payment to be made today and with five additional payments to be made at the start of each of

the next five years.

(1) (10%) Please calculate the present values of the cash flows to the company of the leasing and of buying the machine. Please also decide whether the company should lease or buy the machine.

(2) (10%) Following the fact that leasing is very much like buying the asset with a loan, please use the equivalent-loan method to devise a hypothetical loan that is somehow equivalent to the lease, and to decide whether the company should lease or buy the machine (At least, you should show how to implement the equivalent-loan method). Please explain carefully why or why not the decision is different form that of (1).

6. (1). (5%) If p(European put option price)=$1, S(Stock price)=$37, X(Exercise price)=$40, T(Life of option)=0, Is there an arbitrage opportunity? If yes, what should you do? Is borrowing or lending required? Why?

(2) (5%) If p=$4, S=$37, X=$40, T=0. Is there an arbitrage opportunity? If yes, what should you do? Is borrowing or leading required? Why?

(3) (10%) Suppose T=.5, instead of T=0, p=$1, and r(risk-free rate)=5%. Is there an arbitrage opportunity? If yes, what strategy should you take? Please verify your strategy according to whether the price of the stock at maturity is greater than , equal to, or less than the exercise price.

試題完