

國立中山大學 105 學年度金融創新產業碩士專班招生考試試題

科目名稱：財務管理

※本科目依簡章規定「不可以」使用計算機，以下題目包括兩部分，共有填充題及問答申論題。

第一部分：共 5 格填充題，每一格 10 分，共計 50 分，只需要填入最後的完整答案。

1. Analysis of past monthly movements in HTC's stock price produces the following estimates: $\alpha = 4.5\%$ and $\beta = 1.6$. If the market index subsequently rises by 15% in one month and HTC's stock price increases by 25%, what is the abnormal change in HTC's stock price? ____ (1) _____
2. A random walk process for a single stock consists of the toss of a fair coin at the end of each day. If the outcome is heads, the stock price increases by 1.75%. If the outcome is tails, the stock price decreases by 0.95%. What is the drift of such a process? ____ (2) _____
3. A firm produces \$124 million of net income on \$1,600 million of assets. Through a six-sigma project, the firm is able to decrease the assets employed to \$1,250 million. Given a 6% cost of capital, what is the increase in the EVA (Economic Value Added)? ____ (3) _____
4. Consider a project that costs 100 and generates a single cash-flow in one year. This cash-flow is equal to 120 with probability q or 90 with probability $(1-q)$. The IRR of the project is equal to 10%. Find q . ____ (4) _____
5. The correlation coefficient between a stock and the market portfolio is 0.6. The standard deviation of return of the stock is 30% and that of the market portfolio is 20%. Calculate the beta of the stock. ____ (5) _____

第二部分：共有 4 題問答申論題，共計 50 分。

(一)投資學在理論上，強調利用「證券組合 (Portfolio)」來分散風險；因此，許多人認為企業應該以「多角化 (Diversification)」來分散風險。試說明及分析兩者間的差異。(15%)

(二)說明 Bank3.0 (金融 3.0) 與 金融科技 (Fintech) 的差異及發展?(15%)

(三)說明「內線交易 (Insider's Trading)」之意義，舉一個實例說明。(10%)

(四)簡述 MM 「資本結構無關理論」之意義。(10%)

[題目結束]