

國立聯合大學 106 學年度

寒假轉學生招生考試試題紙

科目： 財務管理 第 1 頁共 2 頁

一、 (16%) Consider the following information about two securities.

	Standard Deviation	Beta
Security 1	32%	0.9
Security 2	15%	1.8

- (a) Which has greater total risk? Why?
- (b) Which has greater systematic risk? Why?
- (c) Which has greater unsystematic risk? Why?
- (d) Which asset will have a higher risk premium? Why?

二、 (39%) Consider the following two mutually exclusive projects:

Year	Cash Flow (A)	Cash Flow (B)
0	-\$300,000	-\$40,000
1	50,000	15,000
2	50,000	20,000
3	30,000	18,000
4	380,000	12,000

Which project you choose, if any, you require a 10% return on your investment.

- (a) If you apply the payback criterion, which investment will you choose? Why?
- (b) If you apply the discounted payback criterion, which investment will you choose? Why?
- (c) If you apply the NPV criterion, which investment will you choose? Why?
- (d) If you apply the IRR criterion, which investment will you choose? Why?
- (e) If you apply the profitability index criterion, which investment will you choose? Why?
- (f) Based on your answers in (a) through (e), which project will you finally choose? Why?

三、 (25%) Titan Mining Corporation has 14 million shares of common stock outstanding, 900,000 shares of 9 percent preferred stock outstanding and 220,000 ten percent semiannual bonds outstanding, par value \$1,000 each. The common stock currently sells for \$42 per share and has a beta of 1.15, the preferred stock currently sells for \$80 per share, and the bonds have 17 years to maturity, the yield to maturity is 11.19514 percent, and sell for 91 percent of par. The market risk premium is 11.5 percent, T-bills are yielding 7.5 percent, and the firm's tax rate is 32 percent. What discount rate should the firm apply to a new project's cash flows if the project has the same risk as the firm's typical project?

四、 Answer the following independent questions:

1. (10%) Suppose your company needs \$14 million to build a new assembly line. Your target debt-equity ratio is 0.84. The flotation cost for new equity is 9.5 percent, but the flotation cost for debt is only 2.5 percent. What is the true cost of building the new assembly line after taking flotation costs into account?

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科目： 財務管理 第 2 頁共 2 頁

2. (10%) A firm has a retention ratio of 45 percent and a sustainable growth rate of 6.2 percent. The capital intensity ratio is 1.2 and the debt-equity ratio is 0.64. What is the profit margin?

附表：

【一元複利現值表】

n r	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6228	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229