

**INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS
OF PAKISTAN**

PROFESSIONAL-IV EXAMINATION-SPRING (SUMMER), 2004

Sunday, the 30th May, 2004

918

STRATEGIC FINANCIAL MANAGEMENT

Time allowed—2 Hours 40 Minutes

Maximum Marks—90

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- (i) Attempt ALL questions.
 - (ii) Answers must be neat, relevant and brief.
 - (iii) In marking paper, the examiners take into account clarity of exposition, logic of arguments, effective presentation, and use of clear diagram/chart, where appropriate.
 - (iv) Read the instructions printed on the top cover of answer script CAREFULLY before attempting the paper.
 - (v) Use of non-programmable scientific calculators of : O Casio fx-82LB, O Casio fx-82 Super, O Casio fx-350 D, O Casio fx-350 HA. models is allowed.
 - (vi) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
 - (vii) Question No. 1 _ "Multiple Choice Questions" printed separately, is an integral part of this paper.
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- | | Marks |
|---|-------|
| Q. 2. (a) Write short notes on : | 8 |
| (i) Rights shares. | |
| (ii) ABC plan for control over inventory. | |
| (iii) Primary capital markets. | |
| (iv) Secondary capital markets. | |
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| (b) There was confusion on how to approach the problem of net present value analysis for an automation proposal in HOPEFUL ENTERPRIZES (HE), hence they have approached for a consultancy from the Professional Association of Management | |

P.T.O.

Accountants (PAMA), where you are luckily available, and the proposal has been marked to you. The data and dialogues are given below :

"I'm not sure we should lay out Rs. 500,000 for the automated welding machine," said HOPEFUL, president of HE. "That's a lot of money, and it would cost us Rs. 80,000 for software and installation, and another Rs. 3,000 every month just to maintain the thing. In addition, the manufacturer advises that it would cost Rs. 45,000 more at the end of seven years to replace worn-out parts".

"I admit it's a lot of money," said HOPEFUL JR., the controller. "But you know the turnover problem we've had with the welding crew. This machine would replace six welders at a cost savings of Rs. 108,000 per year. And we would save another Rs. 6,500 per year in reduced material waste. When you figure that out, the automated welding machine would last for 12 years, which adds up to a pile of savings. I'm sure the return would be greater than our 16% required rate of return."

"I'm still not convinced," countered HOPEFUL. "We can only get Rs. 12,000 scrap value out of our old welding equipment if we sell it now, and all that new machine will be worth in 12 years is Rs. 20,000 for parts. But have your people compile the figures and we'll talk about them at the Executive Committee meeting next week."

Required :

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|-----------|---|---|
| (i) | Compute the net annual cost savings promised by the automated welding machine and investment needed. | 5 |
| (ii) | Using the data from (i) above and other data from the problem, compute the automated welding machine's net present value. Would you recommend purchase ? Explain. | 5 |
| (iii) | Assume that management can identify several intangible benefits associated with the automated welding machine, including greater flexibility in shifting from one type of product to another, improved quality of output, and faster delivery as a result of reduced throughput time. What amount (Rs. value) per year would management have to attach to these intangible benefits in order to make the new welding machine an acceptable investment ? | 5 |
| Q. 3. (a) | What are the similarities and differences among all sell-offs, spin-offs, and equity carve out ? Is one method better than the others ? Why would a company want to divest itself of a business unit ? | 7 |

- (b) Tokay Enterprises is considering going private through a leveraged buy-out by management. Management presently owns 21 per cent of the 5 million shares outstanding. Market price per share is Rs. 20, and it is felt that a 40 percent premium over the present price will be necessary to entice public shareholders to tender their shares in a cash offer. Management intends to keep their shares and to obtain senior debt equal to 80 percent of the funds necessary to consummate the buy-out. The remaining 20 percent will come from junior sub-ordinated debentures. Terms on the senior debt are 2 percent above the prime rate, with principal reductions of 20 percent of the initial loan at the end of each of the next 5 years. The junior sub-ordinated debentures bear a 13 percent interest rate and must be retired at the end of 6 years with a single balloon payment. The debentures have warrants attached that enable the holders to purchase 30 percent of the shares at the end of year 6. Management estimates that earnings before interest and taxes will be Rs. 25 million per year. Because of carry forwards of tax losses, the company expects to pay no taxes over the next 5 years. The company will make capital expenditures in amounts equal to depreciation.

Required :

- (i) If the prime rate is expected to average 10 percent over the next 5 years, is the leveraged buy-out feasible? 8
- (ii) Can it be a better choice if management inducts one more director for 9% share-holding at same buy-out price, keeping debt and debenture at same proposed levels. 6
- (iii) Can you suggest a better remedy to make buy-out a success. 2
- Q. 4. (a) Do you agree with the statement that diversification of assets by a company is an effort to reduce volatility of investments? 4
- (b) Silicon wafer company presently pays a dividend of Re. 1. This dividend is expected to grow at a 20 percent rate for 5 years and at 10 percent per annum, thereafter. The present market price per share is Rs. 20.

Required :

- Using a dividend discount model approach for estimating capital costs, what is the company's expected, or required return on equity using 18 percent and 19 percent as discount rates? 12

- (c) Describe various factors that should be considered while declaring "Cash Dividend". 6
- Q. 5. (a) Discuss various types of real options available in capital budgeting. 6
- (b) A drug products company could invest in a new drug project with an estimated life of 3 years. If demand for the new drug in the first year is favourable, it is almost certain that it will be favourable in years 2 and 3. By the same token, if demand is low in the first year, it will be low in the subsequent years as well. Owing to this likely demand relationship, an assumption of perfect correlation of cash flows over time is appropriate. The cost of the project is Rs. 1 million, and possible cash flows for the three years are :

Year 1		Year 2		Year 3	
Proba- bility.	Cash Flow. Rs.	Proba- bility.	Cash Flow. Rs.	Proba- bility.	Cash Flow.
0.10	ZERO	0.15	100,000	0.15	ZERO
0.20	200,000	0.20	400,000	0.20	150,000
0.40	400,000	0.30	700,000	0.30	300,000
0.20	600,000	0.20	1,000,000	0.20	450,000
0.10	800,000	0.15	1,300,000	0.15	600,000

Required :

- (i) Assuming that the risk free rate is 8 percent and that it is used as the discount rate, calculate the expected value and standard deviation of the probability distribution of possible net present values. 8
- (ii) Assuming a normal distribution, what is the probability of the project providing a net present value of (1) Zero or less ? (2) Rs. 300,000 or more ? (3) Rs. 1,000,000 or more ? 8

THE END