

INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN



Winter (November) 2011 Examinations

Friday, the 25th November 2011

STRATEGIC FINANCIAL MANAGEMENT – (S-601)

STAGE-6

Extra Reading Time: 15 Minutes

Writing Time: 02 Hours 45 Minutes

Maximum Marks: 90

Roll No.:

- (i) Attempt all questions.
- (ii) Answers must be neat, relevant and brief.
- (iii) In marking the question paper, the examiners take into account clarity of exposition, logic of arguments, effective presentation, language and use of clear diagram/ chart, where appropriate.
- (iv) Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper.
- (v) Use of non-programmable scientific calculators of any model is allowed.
- (vi) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
- (vii) Question No.1 – “Multiple Choice Question” printed separately, is an integral part of this question paper.
- (viii) **Question Paper must be returned to invigilator before leaving the examination hall.**

Answer Script will be provided after lapse of 15 minutes Extra Reading Time (9:30 a.m. or 2:30 p.m. [PST] as the case may be).

Marks

Q. 2 (a) Extracts from Income statements and balance sheets of three companies of frozen food industry are summarized below:

| | Alpha Ltd | Beta Ltd | Gama Ltd |
|------------------------------|------------------|-----------------|-----------------|
| Sales | Rs. 1,000,000 | (d) | (g) |
| Net income | Rs. 50,000 | Rs. 60,000 | (h) |
| Total assets | Rs. 200,000 | (e) | Rs. 500,000 |
| Total asset turnover | (a) | (f) | 0.4 |
| Profit margin | (b) | 0.4% | 5% |
| Return on total assets (ROA) | (c) | 2% | (i) |

Required:

Calculate the missing data **(a to i)** of the three companies and comment on the best performance company.

10

(b) The following financial data have been extracted from the books of Shad Limited:

| | | |
|------------------------------|---|-----------|
| Debt ratio | : | 50% |
| Quick ratio | : | 0.80 |
| Total assets turnover | : | 1.5 times |
| Days sales outstanding | : | 36 days |
| Gross profit margin on sales | : | 25% |
| Inventory turnover ratio | : | 5 times |

The company use a 360- day year for all calculation.

| | | Rs.'000' |
|----------------------|-------------------------------|----------|
| Balance Sheet | | |
| Assets: | Liabilities & owner's equity: | |
| Cash | Accounts payable | — |
| Accounts receivable | Long-term debt | 120,000 |
| Inventories | Share capital | — |
| Fixed assets | Retained earnings | 195,000 |
| Total assets | Total liabilities and equity | — |
| Sales | Cost of goods sold | — |

Required:

Workout the missing figures of the balance sheet and the figures of sales and cost of goods sold with the help of given ratios.

08

PTO

- Q. 3 (a)** You have recently joined a pharmaceutical company as a credit manager and your first task is to consider the two alternative proposals for changing the company's current credit policy. The relevant data to choose the optimum credit policy is as under:

| | Current credit policy | Proposal-1 extending the credit period | Proposal-2 reducing the credit period |
|--------------------------|-----------------------|---|---------------------------------------|
| Sales (Rs. in million) | 20 | 22 | 18 |
| Variable cost | 80% | 80% | 80% |
| Cost of capital | 16% | 16% | 16% |
| Credit policy | net 25 | net 30 | net 20 |
| Days sales outstanding | 30 days | 45 days | 22 days |
| Bad debts loss | 2% | 4% | 1% |
| | | on additional sales (2% on old sales will remain same) | on all sales |
| Collection charges (Rs.) | 100,000 | 150,000 | 50,000 |
| Tax rate | 35% | 35% | 35% |

The company offers no discount on early payment. (Assume 360 days in a year).

Required:

- (i) What is the net income under the current credit policy? What is the net income of each proposal taking into account all anticipated changes in carrying cost of accounts receivable and bad debts losses? (Show your workings). 15
- (ii) Should a change in credit policy be made and if so, which one of the two proposals is preferable? 01
- (b)** Quality Foods Limited is in the process of changing its inventory policy to avoid the stock out problem being faced. The current inventory turnover is 16 times. Variable costs are 70% of sales. If inventory levels are increased, it is expected that additional sales will generate and the occurrence of stock outs would decrease. The company's rate of return is 17%. Actual and estimated sales and inventory turnover are as follows:

| Sales (Rs.) | Turnover (Times) |
|-------------|------------------|
| 1,400,000 | 16 |
| 1,560,000 | 14 |
| 1,700,000 | 11 |
| 1,880,000 | 7 |

Required:

Compute the inventory level that will result in the highest net savings. 04

- Q. 4** Ghazi Steel Limited does not believe in using debt and is financed entirely by 2.5 million ordinary shares having a market price of Rs. 20 each. The company is expected to pay constant dividends of Rs. 6 million per annum to perpetuity. This year's dividend has just been paid.

The company is going to launch a new product that would increase dividends by Rs. 200,000 per annum to perpetuity. However, the new product requires an investment of Rs. 1,200,000 including issue cost which will be financed entirely by a new issue of ordinary shares to the general public.

Required:

- (a)** What gains would be made by the original shareholders and the new shareholders, if the new shares are issued (i) at Rs. 20 each and (ii) at Rs. 19.20 each. 08
- (b)** At what price should the new shares be issued? (i) If all the gains from the product go to the original shareholders (ii) If all the gains go to the new shareholders. 07

- Q. 5 (a)** Alpha Engineers Limited is going to acquire a new lathe machine having the following options:

Lease option

One alternative is to lease the Lathe machine on a 4-year contract for a lease payment of Rs. 50,000 per year, payable at the beginning of each year. The lease would include maintenance.

Buying option

The lathe machine could be purchased for Rs. 200,000, financed by a bank loan for the net purchase price. Under the borrow-to-purchase arrangement, Alpha Engineering Limited would have to maintain the lathe at a cost of Rs. 5,000 per year, payable at year end. The company charges depreciation (25%) on diminishing balance method for such type of machines. The depreciation allowance is fully allowed for tax relief. The residual value of the machine after four years is estimated to Rs. 50,000.

Alpha Engineering Limited plans to replace the lathe machine after four years irrespective of whether it leases or buys. The company has a tax rate of 35% and its after tax cost of debt is 13%.

Required:

- (i) What is Alpha Limited's PV cost of leasing? 03
- (ii) What is Alpha Limited's PV cost of buying? Should the lathe machine be leased or purchased? 07

- (b)** Fashion Fabrics Limited is considering the replacement of its old, fully depreciated knitting machine. Two new models are available:

Model-222

The cost of Model-222 is Rs. 2,200,000 with a 5-year expected life and its before tax operating cost is Rs. 120,000 per year.

Model -666

The cost of model-666 is Rs. 3,800,000 with a 8-year life and its before-tax operating cost is Rs. 20,000 per year.

Knitting machine prices are not expected to rise, because inflation will be offset by cheaper components used in the machines. Fashion Fabrics Limited use 12% cost of capital and 35% tax rate for evaluating the capital budgeting decisions.

Required:

Should the firm replace its old knitting machine, and if so, which new machine model should it use based on annual equivalent cost? 10

- Q. 6 (a)** What is the difference between a bonus share and a share split? As a shareholder would you prefer to see your company declare a 100% bonus share or a two-for-one split? Assume that either decision is feasible. 03

- (b)** Seashore Limited paid Rs. 7,200,000 dividends to its shareholders on net income of Rs. 21.6 million in 2011. It was just a normal year and the company's earnings have grown at a constant rate of 10% for the last 10 years. However, in 2012 earnings are expected to increase to Rs. 28.8 million due to an exceptionally profitable new product line introduced in the current year. The life of the new product line is just one year and it is understood that Seashore Limited will not be able to maintain the 2012 level of earnings growth and the company will return to its previous 10 percent growth rate. The company expects to have profitable investment opportunities of Rs. 16.8 million in 2012 and its target debt ratio is 40%.

Required:

- (i) Calculate Seashore's total dividends for 2012, if it follows each of the following policies: 06

PTO

- Its dividends payments are to grow at the long – run growth rate in earnings.
- It continues the 2011 dividend payout ratio.
- It uses a pure residual dividend policy.
- It employs a regular-dividend-plus-extras policy, with the regular dividend being based on the long-run growth rate and the extra dividend is paid following the residual policy.

(ii) Which one of the above policies would you recommend? Justify your answer. 01

(iii) Assume that investors expect that Seashore Limited will pay total dividends of Rs.18,000,000 in 2012 and dividend grows at 10 percent after 2012. If total market value of shares is Rs. 360 million, what is the company's cost of equity? 02

- (c) The Best Way Industries has a net income of Rs. 4,000,000 and it has two million ordinary shares outstanding. The company's shares are currently selling at a Rs. 32 in the market. The Best Way is considering a plan where it will use available cash to repurchase 20% of its shares in the open market. The repurchase is expected to have no effect on either net income or the company price earning (P/E) ratio.

Required:

What will be share price of the Best Way Industries following the shares repurchase? 05

THE END

| PRESENT VALUE FACTOR | | | | | | | | | | | |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Year | 5% | 6% | 7% | 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% |
| 1 | 0.952 | 0.943 | 0.935 | 0.926 | 0.917 | 0.909 | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 |
| 2 | 0.907 | 0.890 | 0.873 | 0.857 | 0.842 | 0.826 | 0.812 | 0.797 | 0.783 | 0.769 | 0.756 |
| 3 | 0.864 | 0.840 | 0.816 | 0.794 | 0.772 | 0.751 | 0.731 | 0.712 | 0.693 | 0.675 | 0.658 |
| 4 | 0.823 | 0.792 | 0.763 | 0.735 | 0.708 | 0.683 | 0.659 | 0.636 | 0.613 | 0.592 | 0.572 |
| 5 | 0.784 | 0.747 | 0.713 | 0.681 | 0.650 | 0.621 | 0.593 | 0.567 | 0.543 | 0.519 | 0.497 |
| 6 | 0.746 | 0.705 | 0.666 | 0.630 | 0.596 | 0.564 | 0.535 | 0.507 | 0.480 | 0.456 | 0.432 |
| 7 | 0.711 | 0.665 | 0.623 | 0.583 | 0.547 | 0.513 | 0.482 | 0.452 | 0.425 | 0.400 | 0.376 |
| 8 | 0.677 | 0.627 | 0.582 | 0.540 | 0.502 | 0.467 | 0.434 | 0.404 | 0.376 | 0.351 | 0.327 |
| 9 | 0.645 | 0.592 | 0.544 | 0.500 | 0.460 | 0.424 | 0.391 | 0.361 | 0.333 | 0.308 | 0.284 |
| 10 | 0.614 | 0.558 | 0.508 | 0.463 | 0.422 | 0.386 | 0.352 | 0.322 | 0.295 | 0.270 | 0.247 |

| CUMULATIVE PRESENT VALUE FACTOR | | | | | | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Year | 5% | 6% | 7% | 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% |
| 1 | 0.952 | 0.943 | 0.935 | 0.926 | 0.917 | 0.909 | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 |
| 2 | 1.859 | 1.833 | 1.808 | 1.783 | 1.759 | 1.736 | 1.713 | 1.690 | 1.668 | 1.647 | 1.626 |
| 3 | 2.723 | 2.673 | 2.624 | 2.577 | 2.531 | 2.487 | 2.444 | 2.402 | 2.361 | 2.322 | 2.283 |
| 4 | 3.546 | 3.465 | 3.387 | 3.312 | 3.240 | 3.170 | 3.102 | 3.037 | 2.974 | 2.914 | 2.855 |
| 5 | 4.329 | 4.212 | 4.100 | 3.993 | 3.890 | 3.791 | 3.696 | 3.605 | 3.517 | 3.433 | 3.352 |
| 6 | 5.076 | 4.917 | 4.767 | 4.623 | 4.486 | 4.355 | 4.231 | 4.111 | 3.998 | 3.889 | 3.784 |
| 7 | 5.786 | 5.582 | 5.389 | 5.206 | 5.033 | 4.868 | 4.712 | 4.564 | 4.423 | 4.288 | 4.160 |
| 8 | 6.463 | 6.210 | 5.971 | 5.747 | 5.535 | 5.335 | 5.146 | 4.968 | 4.799 | 4.639 | 4.487 |
| 9 | 7.108 | 6.802 | 6.515 | 6.247 | 5.995 | 5.759 | 5.537 | 5.328 | 5.132 | 4.946 | 4.772 |
| 10 | 7.722 | 7.360 | 7.024 | 6.710 | 6.418 | 6.145 | 5.889 | 5.650 | 5.426 | 5.216 | 5.019 |