# INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN



# Spring (August) 2012 Examinations

Monday, the 27th August 2012

## STRATEGIC FINANCIAL MANAGEMENT - (S-601)

### STAGE-6

Extra Reading Time: Writing Time:		15 Minutes 02 Hours 45 Minutes	Maximum Marks:	90 Roll No.:					
(i)	Attempt all ques	tions.							
(ii)	Answers must be neat, relevant and brief.								
(iii)	In marking the effective present	question paper, the exa tation, language and use	miners take into account of clear diagram/ chart, w	t clarity of exposition here appropriate.	, logic of arguments,				

- (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** On 1st July 2012, the CFO of Decent Fabrics Ltd., wishes to know the working capital requirement for the current year to arrange the short-term financing. The following information are available:
  - (i) Issued and paid-up capital Rs. 4,000,000.
  - (ii) 10% TFCs Rs. 1,000,000.
  - (iii) Fixed assets valued at Rs. 2,500,000 on 30th June 2012. The depreciation for the current year is Rs. 250,000.
  - (iv) Production during the previous year was 4,000 units. It is planned that this level of activity should be increased by 50% during the current year.
  - (v) The expected ratios of cost to selling price are raw materials 60%, direct wages 10%, and overheads 20%.
  - (vi) Raw materials are expected to remain in stores for an average of two months before these are issued for production.
  - (vii) Each unit of production is expected to be in process for one month.
  - (viii) Finished goods will stay in warehouse for approximately three months.
  - (ix) The suppliers grant credit for two months from the date of delivery of raw materials.
  - (x) Credit period allowed to customers is three months from the date of sale.
  - (xi) Selling price per unit is Rs. 1,000 and selling and administrative expenses including depreciation are 5% of sale. Selling and administrative expenses and interest charges would be paid during the current year.
  - (xii) There is a regular production and sales cycle and the company must maintain a cash balance of Rs. 100,000. Ignore taxes.

#### **Required:**

- (a) Calculate the working capital requirement for the current year. 07
- (b) Prepare the forecast income statement and balance sheet for 2012–13. 08

### Marks

Q. 3 (a) Danial Shaikh recently leased space in a shopping mall and opened a new business, Danial Toys Shop. Business has been good, but Danial has frequently run out of cash. This has necessitated late payment on certain orders, which, in turn, is beginning to cause a problem with suppliers. Danial plans to borrow from the bank to have cash ready as needed, but first he needs a forecast of just how much he must borrow. Accordingly, he asked you to prepare a cash budget for the critical period around Eid-ul-Adha, when needs will be especially high.

Sales are made on a cash basis only. Danial's purchases must be paid for during the following month. Danial pays himself a salary of Rs. 9,600 per month, and the rent is Rs. 4,000 per month. In addition, he must make a tax payment of Rs. 24,000 in October. The current cash on hand (on October 1) is Rs. 800 (Danial does not want to keep more cash in hand to avoid the chances of robbery), but Danial has agreed to maintain an average bank balance of Rs. 12,000 – this is his target cash balance including cash in hand.

The estimated sales and purchases for October, November and December are shown below. Purchases during September amounted to Rs. 280,000.

		Rupees
	Sales	Purchases
October	320,000	80,000
November	80,000	80,000
December	120,000	80,000

### **Required:**

(i) Prepare a cash budget for the months of October, November and December.

07

03

- (ii) Now, suppose Danial were to start selling on credit from October 1, giving customers 30 days to pay. All customers accept these terms. All other facts in the scenario are unchanged. What would the Danial's loan requirements be at the end of October in this case? (Hint: Minimum calculations are required to answer this question.)
- (b) Noor Ltd., is considering to raise working capital of Rs. 400,000 either by a commercial bank loan, secured by accounts receivable, or factoring accounts receivable.

Noor Ltd's bank has agreed to lend the firm 80% of its average monthly accounts receivable of Rs. 500,000 at an annual interest rate of 12%. The bank loan is in the form of a series of 30-day loans. The loan would be discounted, and a 15% compensating balance would also be required. Noor Ltd., can arrange from another commercial bank any shortfall in working capital upto Rs. 75,000 @ 15% annual interest payable in arrear.

A factor has agreed to purchase Noor Ltd.'s 84% accounts receivable. The 16% of receivables would be held in a reserve account. The factor would charge Rs. 1,500 processing fee and 3% factoring commission on the invoice amount each month. The factor would also charge interest @ 10% on accounts receivable purchased. The factoring commission, processing fee and monthly interest payment would be deducted from the accounts receivable purchased on monthly basis. If Noor Ltd., chooses the factoring arrangement, it can eliminate its credit department and reduce operating expenses by Rs. 8,000 per month. In addition, bad debt losses of 2% of the monthly receivables will also be avoided.

### **Required:**

(i) Compute the annual cost associated with each financing arrangement.

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(ii) Discuss some considerations other than cost that may influence management's decision between factoring and bank loan.

09

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01

**Q. 4** Sports & Sports Ltd., presently has Rs. 6 million in debt outstanding, bearing an interest rate of 12 %. It wishes to finance a Rs. 8 million expansion program and is considering three alternative options as enumerated below:

Option 1: Additional debt at 14 % interest;Option 2: Preference shares with a 12% dividend;Option 3: The sale of ordinary shares at Rs. 32 per share.

The company presently has 800,000 ordinary shares outstanding and its tax rate is 40%. **Required:** 

- (a) The company's present earning before interest and taxes (EBIT) are Rs. 3.0 million, what would be earnings per share (EPS) for the three alternatives, assuming no immediate increase in operating profit?
- (b) What is indifference point between the debt option and the ordinary shares option? 05
- (c) Which alternative do you prefer? How much would EBIT need to increase before the next alternative would be "better" in terms of EPS?
  01
- **Q.5 (a)** Natural Food Ltd., is acquiring a new tractor costing Rs. 800,000 for expanding its productive capacity. The tractor can be purchased or leased. The company's tax rate is 40% and its after-tax cost of debt is currently 6%.

If the company decides to purchase the tractor, it would be totally financed with a 10% loan requiring five (5) equal end of year payments. The tractor would be depreciated on straight-line basis during 5-year life. A salvage value of zero is anticipated.

The life of a lease would be 5 years. The lessor intends to charge equal annual lease payments that will enable him to earn 15% on its investment.

## **Required:**

- (i) Calculate the annual lease payment required in order to give the lessor its desired return.
- (ii) Calculate the annual loan payment paying 10% interest.
  - (iii) Determine the after tax cash outflows and net present value (NPV) associated with lease and buy alternatives using after tax cost of debt.12
  - (iv) Which alternative would you recommend? Justify your answer with reasons. 01
- (b) XYZ Ltd., has invented, with a joint venture partner, a remote controlled "superman" toy for children. XYZ Ltd., is sure that it will monopolise the market for the first three years before facing the tough competition.

The details are as under:

- The project has a cost of Rs. 4,200,000 which would be paid immediately.
- Sales are expected to be Rs. 3,100,000 per annum for years 1 to 3, falling to Rs. 1,300,000 per annum for years 4 and 5. The life of this product is five years.
- Cost of sales is 40% of sales.
- Distribution costs represent 10% of sales.
- 20% of net profits are payable to the joint venture partner, one year after the profits are earned.
- The company's cost of capital is 5%.

### **Required:**

Calculate the following:

- (i) net present value (NPV) of the project assuming that all cash flows arise at the end of the year unless otherwise stated. Is the project financially viable?08
- (ii) project's internal rate of return (IRR).

(Ignore taxation)

02

#### Marks

**Q.6 (a)** Why do multinational companies build manufacturing plants abroad when they could build them at home?

02

05

(b) A U.S. Corporation expects to receive 3 pounds sterling of dividends per share after all foreign and U.S. taxes from a British subsidiary this year. The exchange rate at the end of the year is expected to be U.S. \$1.60 per pound, and the pound sterling is expected to depreciate 5% against the dollar each year for an indefinite period. The dividend (in pound) is expected to grow at 10% a year indefinitely. The parent U.S. Corporation owns ten (10) million shares of the subsidiary.

# **Required:**

What is the present value in dollars of its equity ownership of the subsidiary? Assume a cost of equity capital of 15% for the subsidiary.

(c) A USA based company, is required to import some raw material from a foreign supplier and must pay \$ 500,000 to the supplier in six months time. The financial manager is concerned that the cost of these supplies may rise in euro terms and has decided to hedge the currency risk of this account payable. The following information has been provided by the company's bank:

Spot rate (\$ per €):	1.998 ± 0.002
Six months forward rate (\$per €):	1.979 ± 0.004
Money market rates available to US compa	any are as follows:

	Borrowing	Deposit
One year euro interest rates:	12.2%	10.8%
One year dollar interest rates:	8.0%	7.0%

Assume that it is now 1<sup>st</sup> July, 2012 and USA based company has no surplus cash at the present time.

#### **Required:**

What do you understand by money market hedge, forward market hedge, and lead payment. Which one would you recommend to hedge the foreign account payable? Show your computation.

08

	PRESENT VALUE FACTOR															
Year	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162

CUMULATIVE PRESENT VALUE FACTOR																
Year	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192

THE END