#### INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN



# 3<sup>rd</sup> Comprehensive Examination

## Sunday, the 17th February, 2008

#### Time Allowed - 2 Hours

Maximum Marks - 60

- (i) Attempt both the cases 1 and 2, that carry 30 marks each.
- (ii) Answers must be neat, relevant and brief.
- (iii) In marking the question paper, the examiners take into account the clarity of exposition, logic of arguments, effective presentation, language and use of clear diagram or 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 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.

# **CASE # 1**

Marks

Your client, Eshai Ltd., has been negotiating with Bashir Ltd., for the purchase of one of its manufacturing divisions. Profit & loss account of the divisions for the year ended on June 30, 2007, and the balance sheet as at that date, are given below:

# Profit and loss account for the year ended June 30, 2007.

Particulars	Rupe	Rupees in million		
Sales		376		
Less: Materials – external Materials – internal Manufacturing labour Depreciation - plant and machinery Other manufacturing overheads Administrative cost Shares of head office cost  Net Profit	52 43 124 15 64 38 24	<u>360</u> 16		

#### Balance Sheet as at June 30, 2007.

Particulars	Rupees in million		
Fixed Assets:			
Plant and machinery (net)	34		
Stock – value at cost			
<ul> <li>Finished Goods</li> <li>Raw Materials</li> <li>Accounts Receivable</li> <li>Less: Accounts Payable</li> </ul>	72 26 54 186 32		
Capital Employed (Head Office)	154		

Based on discussions held, the following information has been ascertained:

- Materials internal, represent items transferred from another division. Under Bashir's transfer pricing policy, these items are priced at variable cost plus 30% to cover fixed overheads. Eshai would manufacture the items itself under similar conditions to Bashir as regards cost.
- 2. Eshai would take over all the assets of the division and discharge the creditors. However, it is believed that plant & machinery is obsolete. Its scrap value will be Rs. 10,000,000 (Rs. 10 million) and replaced by equipment leased on an annual contract for an initial rental of Rs. 25 million per annum.
- 3. Eshai believes that stock of finished goods could be reduced to one-half of their present level. The reduction would be effected by a special sale, immediately following the acquisition, to realize Rs. 40 million.
- 4. Share of head office cost represents an allocation of administrative costs on the basis of divisional sales. The acquisition would cause Eshai's cost of general management to increase by Rs. 8 million in the first year.
- 5. It is hoped that all the items of cost and revenue for the division and all working capital items would increase at 15% per annum. Eshai belives that a rate of return of 21% per annum reflects the systematic risk of the investment in money terms.

### Required:

You have been contacted to study the foregoing information and prepare calculations to guide Eshai in deciding on the maximum amount to be paid for the division of Bashir.

# **CASE # 2**

You have been appointed finance director of Zeenat Electronics Ltd. The company is considering investing in the production of an electronic security device, with an expected market life of five years.

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The previous finance director has undertaken an analysis of the proposed project; the main features of his analysis are shown below. He has recommended that the project should not be undertaken because the estimated annual accounting rate of return is only 12.3%.

Particulars	Year-0 Rs. 000	Year-1 Rs. 000	Year-2 Rs. 000	Year-3 Rs. 000	Year-4 Rs. 000	Year-5 Rs. 000
Investment in depreciable fixed assets Cumulative investment in working capital	175,500 11,700	15,600	19,500	23,400	27,300	27,300
Sales Materials Labour Overhead Interest Depreciation		136,500 20,865 41,730 1,950 22,464 35,100 122,109	191,100 29,250 58,500 3,900 22,464 35,100 149,214	207,480 35,100 70,200 3,900 22,464 35,100 166,764	223,860 40,950 81,900 3,900 22,464 35,100 184,314	207,480 35,100 70,200 3,900 22,464 35,100 166,764
Profit before tax Taxation Profit after tax		14,391 5,037 9,354	41,886 14,660 27,226	40,716 14,251 26,465	39,546 13,841 25,705	40,716 14,251 26,465

Total initial investment will be Rs. 187,200,000, and average annual after tax profit will be Rs. 23,043,000.

All the above cash flows and profit estimates have been prepared, based on the current prevailing costs and prices, since the previous finance director had assumed, that the sales price could be increased to compensate for any increase in costs.

Following additional information has been made available:

- 1. Selling prices, working capital requirements and overhead expenses are expected to increase by 5% per year.
- 2. Material and labour costs are expected to increase by 10% per year.
- 3. Capital allowance (tax depreciation) are allowable for taxation purposes against profit @ 25% per year on reducing balance basis.
- 4. Rate of taxation on profit is 35% payable, one year in arrear.
- 5. Fixed assets will have no salvage value at the end of five years.
- 6. The company's real after-tax weighted average cost of capital is estimated to be 8% per year and nominal after tax weighted average cost of capital is 15% per year.

Assume that all receipts and payments arise at the end of the year to which they relate, except those in year-0, which occur immediately.

#### **Required:**

- 1. Estimate the net present value of the proposed project. State clearly any assumptions that you have made.
- 2. By how much the discount rate would have to change to result in a net present value of approximately ZERO? (show all computations)
- 3. Describe how sensitivity analysis might be used to assist in assessing this project? What are the weaknesses of sensitivity analysis in capital investment appraisals? Briefly outline alternative techniques of incorporating risk into capital investment appraisal.

## THE END

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