INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

16th Comprehensive Examination

Saturday, the 28th May 2011

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 calculator of any model is allowed.
(v) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
(vi) Multiple Choice Questions (MCQs) printed separately, is an integral part of this question paper.
(vii) Question paper must be returned to the invigilator before leaving the examination hall.

CASE # 1

Marks

Kamran Limited is reviewing the profitability of its three products. The budgeted data for the coming year is as under:

Particulars	Product-A	Product-B	Product-C
Sales – Units	80,000	100,000	120,000
	Rs.	Rs.	Rs.
Sales revenue	880,000	1,500,000	1,440,000
Costs:			
Material	240,000	500,000	480,000
Labour	160,000	400,000	320,000
Overhead	360,000	650,000	600,000
	760,000	1,550,000	1,400,000
Profit/(Loss)	120,000	(50,000)	40,000

The company has taken serious view of the loss of Product-B and is considering to discontinue its production and to utilize the spare capacity for producing 100,000 units of Product-A.

Additional information:

(i) All production is sold.

(ii) 25% of the labour cost for each product is fixed in nature.

(iii) Fixed administrative overheads amounting to Rs.900,000 in total have been apportioned to each product on the basis of units sold and are included in the overhead cost above. All other overhead costs are variable.

(iv) Discontinuation of production of Product-B would eliminate the fixed labour cost associated with it and one-sixth of the fixed administrative overhead apportioned to Product-B.

(v) Increasing the production of Product-A by 100,000 units would mean that the fixed labour cost associated with Product-A would double, the variable labour cost would rise by 20% and its selling price would have to be decreased by Rs.1.50 in order to achieve the increased sales.

Required:

(a) Prepare a marginal cost statement for a unit of each product:

(i) on the basis of the original budget; 11

(ii) if Product-B is deleted. 04

PTO

Marks

(b) Prepare a statement showing the total contribution and profit for each product:

(i) on the basis of original budget; 03

(ii) if Product-B is deleted. 07

(c) Using the results from (a) and (b) above advise whether Product-B should be deleted from the product range, giving reasons in support of your decision. 05

CASE # 2

A company is considering an investment proposal involving a capital outlay of Rs.9,000,000 in plant and machinery. The project would have a life of five (5) years at the end of which the plant and machinery could fetch a resale value of Rs.3,000,000. Further, the project would also require working capital of Rs.1,250,000 in year 1 and to be released from the project at the end of year 5. The project is expected to earn the following cash profits:

Year	1	2	3	4	5
Cash profit (Rs.'000')	3,500	3,000	2,500	2,000	2,000

Depreciation for plant and machinery @ 25% is applicable on WDV (written down value) for Income tax purpose. Assume that the corporate tax is paid one year in arrear of the periods to which it relates and the first year's depreciation allowance, would be claimed against the profits of year 1.

The Assistant Management Accountant has calculated net present value (NPV) of the project using the company's target of 20% pre-tax rate of return and has ignored the taxation effect in the cash flows.

As the newly recruited Management Accountant, you realise that the project's cash flows should incorporate the effects of tax. The corporate tax is 35% during the life of the project and thus the company's after-tax rate of return is 13% (65% of 20%).

Your assistant is surprised to note the difference between discounting the pre-tax cash flows at a pre-tax DCF rate and after-tax cash flows at a after-tax rate.

Required:

(a) Calculate the NPV of the project as the Assistant Management Accountant would have calculated it. 06

(b) Re-calculate the NPV of the project taking tax into consideration. (Show clearly the computation of taxation on profit and depreciation) 20

(c) Comment on the desirability of the project vis-a-vis your findings in (b) above. 04

THE END

PRESENT VALUE FACTORS											
Year	**10%**	**11%**	**12%**	**13%**	**14%**	**15%**	**16%**	**17%**	**18%**	**19%**	**20%**
1	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
2	0.83	0.81	0.80	0.78	0.77	0.76	0.74	0.73	0.72	0.71	0.69
3	0.75	0.73	0.71	0.69	0.67	0.66	0.64	0.62	0.61	0.59	0.58
4	0.68	0.66	0.64	0.61	0.59	0.57	0.55	0.53	0.52	0.50	0.48
5	0.62	0.59	0.57	0.54	0.52	0.50	0.48	0.46	0.44	0.42	0.40
6	0.56	0.53	0.51	0.48	0.46	0.43	0.41	0.39	0.37	0.35	0.33
7	0.51	0.48	0.45	0.43	0.40	0.38	0.35	0.33	0.31	0.30	0.28
8	0.47	0.43	0.40	0.38	0.35	0.33	0.31	0.28	0.27	0.25	0.23
9	0.42	0.39	0.36	0.33	0.31	0.28	0.26	0.24	0.23	0.21	0.19
10	0.39	0.35	0.32	0.29	0.27	0.25	0.23	0.21	0.19	0.18	0.16