INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

18th Comprehensive Examination

Sunday, the 20th November 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

The products of Alif, Bey, Jeem and Dal are manufactured by Aqsam Manufacturers. Following data has been prepared for the first half of the year to decide the most profitable manufacturing of the product(s):

	PRODUCTS			
	1	2	3	4
	Alif	Bey	Jeem	Dal
Production – units	1,140	1,740	870	575
Sale price and cost data per unit:				Rs. '000'
Selling price	405	290	248	342
Direct materials	163	122	103	135
Direct labour	48	33	24	42
Variable overheads	21	18	14	18
Fixed overheads	98	65	50	85
Total	330	238	191	280

The company is considering to maximize the capacity utilization in next half of the year in view of increasing demand of its products. The company has the capacity to increase the production by 4% in the second half of the year. This capacity (4%) may be utilized solely for one product or for combination of these products in any/ optimal proportion.

An associate company has offered to supply 200 units of Product-Bey in the second half of the year at 88% of the selling price fixed by Aqsam Manufacturers. Aqsam Manufacturers will incur an amount equivalent to 2% of selling price as handling charges to market the aforesaid quantity in its brand name. Aqsam Manufacturers can make Product-Alif in place of the purchased quantity of Product-Bey when the offer is accepted.

Required:

(a) Prepare a statement of profit for the first half of the year. 11

(b) Identify the best product for utilization of additional 4% capacity and calculate the total profit resulting from the increased capacity utilization. 04

(c) Evaluate the proposal to buy Product-Bey from the associate company to increase the production of Product-Alif. 05

(d) Which one of the products should be purchased from the associate company at 88% of selling price with 2% handing cost to maximize profit? 10

PTO

CASE # 2

Marks

A company is currently considering a proposal to introduce a new product. A recent market survey has showed the life of the product as four (4) years. The company has paid only 25% of total survey cost of Rs.120 million and the remaining payment is due in four months time. The assistant accountant has prepared the following profit forecasts for the product based on the survey:

Rs. in million

Year	1	2	3	4
Sales	720	800	640	480
Cost of sales	460	560	440	340
Gross profit	260	240	200	140
Less:				
Variable overheads	108	120	96	72
Fixed overheads	100	100	100	100
Market survey written off	120	–	–	–
	328	220	196	172
Net profit / (loss)	(68)	20	4	(32)

There was a feeling among the board members that the product should not be launched due to net loss over product's life cycle. However, before the meeting that has been arranged to decide formally the future of the product, the following additional information has been compiled to review the proposal:

(i) The new product will require the use of an existing machine. This has a written down value of Rs.320 million but could be sold for Rs.280 million immediately if the new product is not launched. If the product is launched, it will be sold at the end of the four-year period for Rs.40 million.

(ii) With the production and sale of new product, the items of working capital i.e., accounts receivable, inventory and accounts payable will increase immediately by Rs.135 million, Rs.45 million and Rs.100 million respectively. The working capital will be needed over the four-year period. However, it will be released at the end of the product life cycle.

(iii) The fixed overheads include a figure of Rs.60 million per year for depreciation of the machine and Rs.20 million per year for the re-allocation of existing overheads of the business.

The company's cost of capital is 10%. Ignore taxation.

Required:

(a) Calculate the incremental cash flows resulting from the decision to launch the new product. 18

(b) Calculate the internal rate of return of the product. 09

(c) Explain, with reasons, whether or not the product should be launched. 03

THE END

PRESENT VALUE FACTOR						
Year	**10%**	**11%**	**12%**	**13%**	**14%**	**15%**
1	0.909	0.901	0.893	0.885	0.877	0.870
2	0.826	0.812	0.797	0.783	0.769	0.756
3	0.751	0.731	0.712	0.693	0.675	0.658
4	0.683	0.659	0.636	0.613	0.592	0.572
5	0.621	0.593	0.567	0.543	0.519	0.497

CUMULATIVE PRESENT VALUE FACTOR						
Year	**10%**	**11%**	**12%**	**13%**	**14%**	**15%**
1	0.909	0.901	0.893	0.885	0.877	0.870
2	1.736	1.713	1.690	1.668	1.647	1.626
3	2.487	2.444	2.402	2.361	2.322	2.283
4	3.170	3.102	3.037	2.974	2.914	2.855
5	3.791	3.696	3.605	3.517	3.433	3.352