INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

PROFESSIONAL-III EXAMINATION-SPRING (SUMMER), 2006

Monday, the 29th May, 2006 778

STRATEGIC MANAGEMENT ACCOUNTING

Time Allowed—2 Hours 45 Minutes *Maximum Marks—90*

(i) Attempt ALL questions.

(ii) Answers must be neat, relevant and brief.

(iii) In marking 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 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 paper.

Marks

Q. 2 (a) What is an activity based approach in designing a costing system? 7

(b) Dolman Appliances Ltd., a domestic appliances manufacturing company is planning to introduce a new product to make use of its surplus capacity. The proposal is to manufacture domestic electrical ovens fitted with a temperature controller. The first year's sale is estimated at 10,000 units and sales expectations for subsequent years is 20,000 units per year. The management has proposed to procure the temperature controllers initially from the market at Rs. 40 each. However, if the company desires to manufacture the temperature controllers in its factory by installing a new machine, it has two alternative proposals as under:

	Installation of British machine	*Installation of Korean machine*
Initial cost of machine	Rs. 1,500,000	Rs, 1,000,000
Useful life	10 years	10 years
Annual fixed overhead (other than depreciation)	Rs. 270,000	Rs. 140,000
Variable expenses per temperature controller	Rs. 20	Rs. 25

Depreciation on machinery is to be charged using straight-line method.

P.T.O

Required: *Marks*

(i) For each of the two levels of output *i.e.* 10,000 and 20,000 controllers, state with suitable workings, whether the company should purchase the controllers from market or install new machine. If your decision is in favour of the installation of new machine, which one of the two new machines is to be installed? 6

(ii) What will be your decision in case the forecast of requirements from the second year onwards is estimated at 40,000 instead of 20,000 temperature controllers? 5

(iii) At what volume of output the installation of the two machines make break-even? 5

Q.3. Prince Chemical International deals in three products, washing soap, detergent and dish wash in the regions of Gilgit and Hunza. At the end of first half of the year 2005-2006, the following absorption based profit statement has been drawn by the management accountant:

	Gilgit	*Hunza*	*Total*
		(Rs. in 000s)	
Sales	9,000	2,700	11,700
Cost of goods sold	6,993	2,097	9,090
Gross Profit	2,007	603	2,610
Administrative expenses	360	108	468
Selling expenses	552	507	1,059
Total expenses	912	615	1,527
Net profit	1,095	-12	1,083

- Administrative expenses are constant and common to both the regions. These are allocated on the basis of sales.

- Selling expenses are semi-fixed but specially relate to the specific region.

The management is worried to note that the decision taken to market the products in Hunza to utilize idle capacity has proved wrong and wants to cover only Gilgit region. The head of marketing division is not satisfied with the profit presentation made by management accountant. He is of the firm opinion that sales effected in the region of Hunza are contributing towards profit. For the next half year, he expects no increase in demand in Gilgit region, while for Hunza he anticipates to sell detergent

or dish wash by 50% more of existing sales. This will utilize the idle capacity in full. The product-wise details for the first half of the year 2005-06 are: *Marks*

	Washing soap	*Detergent*	*Dish wash*
Sales:			
Gilgit (Rs. '000)	3,600	2,700	2,700
Hunza (Rs. '000)	900	900	900
Variable costs (as % of sales):			
Manufacturing	40	35	30
Selling	3	2	2
Specific fixed manufacturing expenses (Rs. '000)	1,710	1,410	1,830

Required :

(i) Prepare a region-wise profit and loss statement for the first half of the year 2005-06 using contribution approach. Also offer your views on the concern of the management and opinion expressed by head of marketing division. 8

(ii) Prepare a product-wise profit and loss statement for the same period using contribution approach. 7

(iii) Submit your well thought out recommendations as to which product should be produced to utilize the idle capacity? 7

Q. 4 (a) "Evaluating performance, decision by decision, is costly. Aggregate measures, like the income statement, are frequently used". How might the wide use of income statement affect managers' decision about buying equipment? 7

Q. 4 (b) At the beginning of 2006, ABC Company adopted the following standards :

Particulars	**Inputs**	**Total Rs.**
Direct materials	3lbs. @ Rs. 2.50 per lb.	7.50
Direct labour	5hours @ Rs. 7.50 per hour.	37.50
Manufacturing overhead :		
Variable	Rs. 3 per direct labour hour	15.00
Fixed	Rs. 4 per direct labour hour	20.00
Standard cost per unit		80.00

Normal production volume per month is 40,000 standard labour hours. ABC's January 2006 budget was based on normal production volume.

P.T.O

During January, 2006, ABC produced 7,800 units, with its accounting records indicating the following : *Marks*

Direct materials purchased	25,000 lbs. @ Rs. 2.60 per lb.
Direct materials used	23,100 lbs.
Direct labour	40,100 hours @ Rs. 7.30 per hour
Manufacturing overhead	Rs. 300,000.

Required :

(i) Prepare a schedule of budgeted production cost for January 2006 based on actual production of 7,800 units. 3

(ii) For the month of January 2006, compute the following variances, indicating whether each is favourable or unfavourable :

1. Materials price variance (based on purchases). 1
2. Materials quantity variance. 1
3. Labour rate variance. 1
4. Labour efficiency variance. 1
5. Factory overhead spending variance. 1
6. Factory overhead efficiency variance. 1
7. Factory overhead capacity variance. 1

(iii) Explain why the company incurred the overhead efficiency variance and overhead capacity variance indentified in requirement (ii) above. 2

(iv) Indicate who would be the most likely responsible for each of the variance computed in requirement (ii) above. 4

Q. 5 (a) "Control systems in non-profit organizations will never be as highly developed as in profit-seeking organizations". Do you agree? Explain. 7

(b) Kratex Corporation has two divisions, located at D.G. Khan and Faisalabad, both manufacturing maiz starch with same grade and quality. The annual output of the division at D.G. Khan is 6,000 tons (80% capacity) and that of Faisalabad is 7,500 tons (60% capacity). The basic raw material used is available locally at both the places but limited to 3,000 tons per annum @ Rs. 4,500 per ton at D.G. Khan and 8,000' tons per annum @ Rs. 5,000 per ton at Faisalabad. Any additional requirements will have to be purchased from other markets at a rate of Rs. 5,750 per ton. F.O.R. at either division. Variable costs at each division are constant per ton of output. For

every 100 tons of output, 80 tons of basic raw material is required. The details of other annual variable and fixed costs of the divisions are as under: *Marks*

	D.G. Khan (Rs. in million)	Faisalabad (Rs. in million)
Other variable cost (excluding raw material)	39	48
Fixed cost	25	30

Required:

(i) Determine for each ton of out-put, the raw material cost, other variable cost and total cost, in respect of each division. Show all your workings. 5

(ii) Determine the quantity of production that could be transferred between the two divisions, if the company desires to fully utilize the available local supplies of raw material to reduce cost of production, keeping the total production of both the divisions put together, the same as at present. 5

(iii) Prepare a revised schedule of production for both the divisions based on the answer to (ii) above and also identify the cost saving, if any. 5

THE END