INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

September 2011 Extra Attempt Examinations

Monday, the 19th September 2011

COST AND MANAGEMENT ACCOUNTING-PERFORMANCE APPRAISAL – (S-303)
STAGE-3

Extra Reading Time: **15 Minutes**
Writing Time: **02 Hours 45 Minutes**
Maximum Marks: 90
Roll No.:

(i) Attempt all questions.
(ii) Answers must be neat, relevant and brief.
(iii) In marking the question 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 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 after finishing/ writing the exam.**

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 **(a)** What is the fundamental difference between traditional costing method and activity-based costing (ABC)? 03

(b) A company started a quality improvement programme in July 2010. At the end of first quarter of 2011 management of the company desires to compare the results with the first quarter of previous year to assess the financial impact of quality improvement programme. Statistics for 1st quarters of both years are as under:

Rs. '000'

Costs	2010			2011		
	July	August	Sept.	July	August	Sept.
Process engineering	66	74	83	116	146	183
Training	393	431	477	633	765	911
Sales lost	1476	1209	993	734	632	576
Sales return	807	632	491	339	285	252
Inspection	42	47	53	72	89	110
Rework	474	380	300	218	185	167
Quality assurance	186	195	206	239	263	288
Scrap	528	435	357	267	231	210
Testing	48	51	56	68	78	90
Customer complaint	117	104	90	75	68	65

Required:

(i) Prepare a 'Cost of Quality Report' showing monthly and quarterly results of two years that classifies into the following: 10
- Prevention cost
- Appraisal cost
- Internal failure cost
- External failure cost
- Total cost

(ii) Offer your comments on the quality report produced. 03

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Marks

Q. 3 A company produces two joint products 'X' and 'Y' from the same basic materials. The processing is completed in three departments. Materials are mixed and processed in Department-A. At the end of this process, 'X' and 'Y' get separated. After separation 'X' is completed in Department-B and 'Y' is finished in Department-C.

During a particular period 400,000 Kgs of raw material were processed in Department-A, at a total cost of Rs.1,750,000 and the resultant 60% becomes 'X' and 30% 'Y' and 10% normally lost in processing.

'X' is further processed in Department-B at a cost of Rs.360,000 where 1/6 of the quantity received from Department-A is lost in processing.

In Department-C further new material added to the material received from Department-A and weight mixture is doubled, there is no quantity loss in the department and further processing and material cost is Rs.300,000.

Following are the details:

	Product X	Product Y
Quantity sold (Kgs.)	180,000	230,000
Sales price per Kg (Rs.)	20	8

There were no beginning inventories. If these products are sold at split-off-point, the selling price of 'X' and 'Y' would be Rs. 16 and Rs. 8 per Kg respectively.

Required:

(a) Prepare statements showing:

(i) Apportionment of joint cost to product 'X' and 'Y' in proportion of sales value at split-off point. 04

(ii) Cost per kilogram of each product indicating joint cost, processing cost and total cost separately. 03

(iii) Product-wise profit for the period. 06

(b) Give your recommendations to maximize the profitability. 04

Q. 4 Following details are available from master budget of XYZ Company having single product line for the year ended June 30, 2011:

	Rs. '000'
Sales (16,000 units @ Rs.170 per unit)	2,720
Cost of Sales:	
Raw material (28,000 kgs @ Rs. 20 per kg)	560
Direct labour (2,560 hours @ Rs. 250 per hour)	640
Variable factory overhead	280
Fixed factory overhead	600
Administrative expenses:	
Fixed	392
Variable (5% of Sales)	

- There has never been any significant finished goods inventory in the past.
- The company uses direct standard costing for its cost and financial accounting records.
- Annual production and sales were 24,000 units and 18,000 units respectively.
- Flexible budget showed an expected operating income of Rs.250,000 at a production and sales level of 18,000 units annually.
- The company calculated a loss of Rs.74,000 based on direct costing system.
- Newly appointed Cost & Management Accountant prepared a statement showing an operating income of Rs.151,000 under standard absorption costing method.

- Actual sales and costs for the year are as follows: **Marks**

	Rs. '000'
Sales (18,000 units @ Rs.170 per unit)	3,060
Cost of Sales:	
Raw material used (40,000 kgs @ Rs. 25 per kg.)	1,000
Direct labour (4,080 hours @ Rs. 250 per hour)	1,020
Variable factory overhead	436
Fixed factory overhead	628
Administrative expenses:	
Fixed	452
Variable (5% of Sales)	153

Required:

(i) Calculate the operating income of master budget. 02

(ii) Reconcile the operating income of master budget with the flexible budget. 05

(iii) Reconcile the income/ (loss) based on standard direct costing system with the standard absorption costing system. 03

(iv) Identify material, labour, overheads and administrative expenses variances including factory overhead controllable variance while reconciling flexible budget income with loss under standard direct costing system. 13

Q. 5 M/s Niazi Manufacturers produces two products P and Q, and is preparing annual budget for 2012. Following data has been collected for this purpose:

- Standard data (per unit of products) are as under:

Direct materials	Standard rate Rs. per Kg	Product P Kgs.	Product Q Kgs.
Alpha	100	10	4
Beta	200	5	6
Direct labour	Rs. per hour	Hours	Hours
Technical workers	300	8	10
Skilled workers	200	12	5

- Fixed production overhead is absorbed on the basis of direct labour hours. There is no variable overhead. Administration, selling and distribution expenses are absorbed on budgeted basis of 20% of production cost.
- Profit is budgeted at 20% of selling price.
- Other Budgeted Data:

	Product P Rs. '000'	Product Q Rs. '000'
Sales for the year - North division	150,000	120,000
South division	250,000	360,000
East division	190,000	160,000
West division	160,000	320,000
Finished goods inventory: (valued at standard production cost)		
1st January 2012	50,000	120,000
31st December 2012	150,000	200,000
Direct material inventory: (valued at standard prices)	Material Alpha Rs. '000'	Material Beta Rs. '000'
1st January 2012	32,000	30,000
31st December 2012	16,000	42,000

Additional information:

- Fixed production overhead per annum Rs. 408 million.
- Direct labour hours per annum 2,550,000.

It is expected that there will be no work-in-process at the beginning or end of the year.

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Required:

Prepare the following:

(i)	Statement of unit cost and selling price of each product.	08
(ii)	Production budget (units).	04
(iii)	Direct material cost budget (in units and in Rupees).	03
(iv)	Purchase budget (in units and in Rupees).	06
(v)	Direct labour budget (hours and cost).	03

Q. 6 Financial data for Al-Hajar Company for last year appear below:

Al-Hajar Company
Statements of Financial Position — Rupess

	Beginning Balance	Ending Balance
Assets:		
Cash	180,000	240,000
Accounts receivable	165,000	150,000
Inventory	75,000	90,000
Plant and equipment (net)	270,000	240,000
Investment in Bolan Company	75,000	90,000
Land (undeveloped)	180,000	180,000
Total assets	945,000	990,000
Liabilities and owners' equity:		
Accounts payable	105,000	135,000
Long-term debt	750,000	750,000
Owners' equity	90,000	105,000
Total liabilities and owners' equity	945,000	990,000

Al-Hajar Company
Income Statement — Rupees

Sales		1,833,000
Less operating expenses		1,649,700
Net operating income		183,300
Less interest and taxes:		
Interest expense	90,000	
Taxes	30,000	120,000
Net income		63,300

The company paid dividends of Rs.48,300 last year. The "Investment in Bolan Company" on the statement of financial position represents an investment in the stock of Bolan Company.

Required:

(a) Workout the company's profit margin, assets turnover, and return on investment for last year. 07

(b) The Board of Directors of Al-Hajar has set a minimum required rate of return as 25%. What was the company's last year residual income? 03

THE END