INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

Fall (Winter) 2009 Examinations

Thursday, the 19th November 2009

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

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

(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 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.

Marks

Q. 2 **(a)** Discuss three measures, the management of an organization need to implement while applying the theory of constraints. 03

(b) A food manufacturing and packaging company started a quality improvement programme in July 2008 after completing its first year of operation. Following are the summarized monthly operating results of its Total Quality Management (TQM) programme for the first quarter of 2008 and 2009:

Rs. ‘000’

Costs	2008			2009		
	July	August	Sept.	July	August	Sept.
Sales lost	984	806	662	489	421	384
Sales return	538	421	327	226	190	168
Rework	316	253	200	145	123	111
Scrap	352	290	238	178	154	140
Inspection	28	31	35	48	59	73
Testing	32	34	37	45	52	60
Training	262	287	318	422	510	607
Process engineering	44	49	55	77	97	122
Quality assurance	124	130	137	159	175	192
Customer complaint	78	69	60	50	45	43

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 above quality report. 03

PTO

Marks

Q. 3 Following is the information related to three companies of an industry for a common product:

Rupees per unit

	X & Co	Y Enterprises	Z & Co
Share of production	40%	35%	25%
Direct materials	45	51	54
Direct labour	30	42	36
Depreciation	90	48	60
Other overhead	90	84	90
Total cost per unit	255	225	240
Non-current assets	900	480	600
Working capital	42	45	45

Non-current liabilities for all the companies are zero.

All the companies require 20% return on capital employed to arrive at fair price per unit. 10,000 units of output are estimated for all three companies.

Required:

Calculate the following for all three companies:

(i) Return on capital employed per unit 03

(ii) Fair price per unit 03

(iii) Total sales in rupees 03

(iv) Uniform selling price per unit 03

Q. 4 Following details are available from master budget of a company having single product line for the year ended June 30, 2009:

	Rupees in '000'
Sales (160,000 units @ Rs.17 per unit)	2,720
Cost of Sales:	
Raw material (280,000 kgs @ Rs.2 per kg)	560
Direct labour (25,600 hours @ Rs.25 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.
- The company uses direct standard costing for its cost and financial accounting records.
- Annual production and sales were 240,000 and 180,000 units respectively.
- Flexible budget showed an expected operating income of Rs.250,000 at a production and sales level of 180,000 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:

	Rupees in '000'
Sales (180,000 units @ Rs.17 per unit)	3,060
Cost of Sales:	
Raw material used (400,000 kgs @ Rs.2.50 per kg.)	1,000
Direct labour (40,800 hours @ Rs.25 per hour)	1,020
Variable factory overhead	436
Fixed factory overhead	628
Administrative expenses:	
Fixed	452
Variable (5% of Sales)	153

Required: **Marks**

(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 controllable variance while reconciling flexible budget income with loss under standard direct costing system.	13

Q. 5 The relevant data from the budgeted balance sheet as on August 31, 2009 of a private limited is as follows:

Assets and equities	**Rs in '000'**
Non-current assets:	
Property, plant and equipment	282,550
Current assets:	
Raw material inventory (50,000 units)	2,160
Finished goods inventory (55,000 units valued at marginal cost)	5,225
Accounts receivable	9,040
Cash and bank balances	3,395
Total assets	302,370
Share capital and reserves:	
Issued, subscribed and paid-up capital	250,000
Share premium	30,000
Unappropriated profit	20,420
Total shareholders equity	300,420
Current liabilities:	
Accounts payable	1,950
Total equity and liabilities	302,370

The estimates for next four months period are as follows:

	September	October	November	December
Sales (units)	40,000	42,000	48,000	47,000
Production (units)	35,000	37,500	45,000	45,000
Purchase of raw materials (units)	40,000	40,000	42,500	42,500
Labour and variable overheads (at Rs.65 per unit) Rs.	2,275,000	2,437,500	2,925,000	2,925,000

- Fixed overheads excluding depreciation and mark-up on term finance loan are Rs.600,000 per month.
- The company uses the FIFO method for inventory valuation. There is no work-in-process inventory in the product line.
- The company intends to sell each unit for Rs.219 and estimated that it will have to pay Rs.45 per unit for raw materials.
- One unit of raw material is required for each unit of finished product.
- A term finance loan of Rs.60 million with an annual mark-up of 12% per annum will be released on November 1, 2009 repayable after every six months.
- Depreciation inclusive of addition in assets for four months is calculated at Rs.9,615,000.

Required:

Prepare the following for four (4) months from September to December 2009:

(i)	Raw materials budget in units	04
(ii)	Finished goods budget in units	04
(iii)	Projected Income statement for the period ended December 31, 2009	15

PTO

Marks

Q. 6 An automobile company is much decentralized organization. Each departmental manager has full authority for procurement and selling decisions. The Speedometer Department of the company has been the major supplier of 16,000 speedometers that the motor cycle assembly department needs each year.

The Speedometer Department has recently increased its selling price from Rs.1,600 to Rs.1,760 per unit. Due to this increase in price, the motor cycle assembly department plans to procure all its speedometers from three different external suppliers at Rs.1,600 per unit. Following data is available:

	Rs. per unit
Variable cost in Speedometer Department	1,520
Fixed cost in Speedometer Department	160
External Supplier's price per speedometer	1,600

Chief Executive of the company directed the Motor Cycle Assembly Department to purchase 16,000 speedometers internally.

Required:

Calculate the impact on operating income of the company for purchasing all the Speedometers internally under the following alternatives, if the speedometer department:

(i) has no alternate use for the facilities used to produce speedometer. 05

(ii) has no alternate use for its facilities and the external suppliers drop the price to Rs.1,480 per speedometer. 05

(iii) can use the facilities for another car assembly department, which will result in annual cash operating savings of Rs.1,856,000. 06

THE END