INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN

New Fall (E) 2011, April 2012 Examinations

Tuesday, the 17th April 2012

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

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

(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 before leaving the examination hall.**

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 'Metallic Finishers' is a leading paint spraying company. The metal products of three (3) customers are sprayed by the company. Each customer requires different numbers of coats as given below along with consumption of paint per unit:

Customers	Coats	Litres
X	7	7.6
Y	6	8.6
Z	5	6.3

Monthly production data of each customer's product is budgeted as follows:

	X	Y	Z
Units to be sprayed	5,400	4,360	3,600
Batches of paint required (No.)	27	20	40
Machine attendants time (Minutes)	30	45	75
Cost of paint per unit (Rs.)	152	111.80	189

Machine attendants are paid Rs. 53 per hour. Overhead costs are absorbed on the basis of labour hours. Following are the monthly budgeted overheads showing the bases of cost driver in activity based costing approach:

Activity	Amount (Rs.)	Cost driver
Paint stirring and quality control	240,810	Batch of paint
Electricity	1,047,000	Coats of paint
Filling of spraying machines	649,140	Litres of paint

Required:

Calculate the unit cost of each product under following systems:

(a) Absorption costing. **07**

(b) Activity based costing. **08**

PTO

Marks

Q. 3 A cell phone manufacturing company is considering to implement a Just-in-time (JIT) production system, which would require annual setup cost of Rs. 150 million. The company estimates the following annual benefits would arise from this system:

(i) Average inventory would decline to Rs. 200 million from Rs. 900 million.

(ii) 30% decline in insurance, space, materials handling and setup costs of Rs. 200 million.

(iii) 20% reduction in rework costs. The company currently incurs Rs. 350 million on rework.

(iv) In view of savings under various costs, company would be able to spend Rs. 30 million on quality control.

(v) Better quality would enable the company to raise the selling price by Rs. 3,000 per unit on annual sales of 30,000 units.

The company's required annual rate of return on inventory investment is 12%.

Required:

(a) Calculate the net benefit or cost to the company from implementing a JIT production system. **13**

(b) What other non-financial (qualitative) factors should be considered before deciding to implement JIT system? **02**

Q. 4 Budgeted and actual results of a soft drink manufacturing company for a particular quarter is as follows:

Product	Budgeted Data			Actual Results		
	Selling Price/ Carton (Rs.)	**Variable Cost/ Carton (Rs.)**	**Sale Qty. No. of Cartons**	**Selling Price/ Carton (Rs.)**	**Variable Cost/ Carton (Rs.)**	**Cartons Sold (Nos.)**
Cool Cola	480	320	400,000	496	360	480,000
Digestrite	320	224	600,000	340	220	900,000
KeenooOne	560	360	1,500,000	544	368	1,620,000

Required:

(a) Calculate the following product-wise and total for the company:

(i) Budgeted and actual sales mix percentages. **02**

(ii) Budgeted and actual contribution margin. **08**

(iii) Sales volume variance. **04**

(iv) Sales quantity variance. **04**

(v) Sales mix variance. **04**

(b) What inferences can you draw from the calculation of above variances? **03**

Q. 5 **(a)** Distinguish between feedback and feed-forward controls. **05**

(b) A group of companies comprises two companies namely ABC Press and XYZ Publishing. The forecasted balance sheets as of June 30, 2012 for both companies are as under:

Rs. in million

	ABC Press	**XYZ Publishing**
Current assets	100	80
Non-current assets (net)	100	120
Total assets	**200**	**200**
Current liabilities excluding short-term loan	5	20
Short-term loan	15	60
Long-term debt	80	20
Paid-up capital	50	50
Un-appropriated profit	50	50
Total liabilities and equity	**200**	**200**

Marks

Profit before financial charges and taxation for both the organizations are estimated at Rs. 30 million. Income tax rate is 35%. Assume the following two different situations:

(1) Mark-up rate on short-term loan is 10% and the rate of long-term debt is 11%.

(2) The rate on short-term loan rises to 12%, while the rate on long-term debt rises to 13%.

Required:

Prepare/ calculate the following for both the organizations under the above two different situations:

(i) Projected income statement for the year ended June 30, 2012. (Note: Start the statement from profit before financial charges and taxation) **16**

(ii) Rate of return on equity. **04**

Q. 6 A company compares the performance of its divisions by return of capital employed, using the following assumptions:

- Net current assets – at average value throughout the year.
- Fixed assets – at written down value.
- Depreciation is calculated on straight-line basis.

The financial position of one of its divisions for a particular year-end, excluding the outcome of separate transactions mentioned at Sr. No. (i) and (ii) below, was as follows:

	Rs. in million
Profit for the year	225
Fixed assets:	
Original cost	1,000
Accumulated depreciation	475
Net current assets (average for the year)	250

The division was involved in the following separate transactions before the financial position as stated above:

(i) It purchased equipment on the start of its financial year at a cost of Rs. 120 million. Resulting savings were Rs. 35 million per year throughout 6 years life of asset, after which it will have no scrap value.

(ii) It negotiated a bank overdraft of Rs. 20 million for the year to take advantage of quick payment discounts offered by creditors; this reduced costs by Rs. 4 million yearly.

Required:

Calculate the rate of return on capital employed if:

(a) none of the above-mentioned separate transactions (i) and (ii) had taken place. **02**

(b) transaction (i) above only had taken place. **04**

(c) transaction (ii) above only had taken place. **04**

THE END