

PGDM(IB)(2013-15)
MANAGERIAL ACCOUNTING
IB-203

Trimester – II, End-Term Examination: December 2013

Time allowed: 2 Hrs 30 Min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	$3 \times 5 = 15$
B	2 out of 3 (Long Questions)	10 Marks each	$2 \times 10 = 20$
C	Compulsory Case Study	15 Marks	15
		Total Marks	50

SECTION – A

Question A1. It has been argued that full cost is an inappropriate basis for setting transfer prices. Outline the objections which can be levied at this basis.

Question A2. Evaluate whether the assumption that costs are readily identifiable as either fixed or variable throughout a range of production is realistic. Give examples of any alternative classification.

Question A3. A retailer with a chain of stores is planning product promotions for a future period. The following information relates to a product which is being considered for a four week promotion:

Normal weekly sales (i.e. without promotion), 2400 units at Rs. 2.80 per unit.

Normal contribution margin, 45% of normal selling price.

Promotional discount, 20% (i.e. normal selling price reduced by 20% during the promotion).

Expected promotion sales multiplier, 2.5 (i.e. weekly sales units expected during the promotion is $2.5 \times 2400 = 6000$ units).

Additional fixed costs incurred to run the promotion (i.e. unaffected by the level of promotional sales) are forecast to be Rs. 5400. Unit variable costs would be expected to remain at the same level as normal. Should the company go ahead with the promotion plan? Why?

Question A4. (a) Explain why predetermined overhead absorption rates are preferred to overhead absorption rates calculated from factual information after the end of a financial period in a Job Order Costing Scenario.

(b) The production overhead absorption rates of factories X and Y are calculated using similar methods. However, the rate used by factory X is lower than that used by factory Y. Both factories produce the same type of product. You are required to discuss whether or not this can be taken to be a sign that factory X is more efficient than factory Y.

Question A5. Explain the least square regression method of separating Fixed and Variable Costs from Semi-Variable Costs with an example.

SECTION – B

Question B1. Ellix Company manufactures two models of ultra-high fidelity speakers, the X200 model and the X99 model. Data regarding the two products follow:

Additional information about the company follows:

Product	Direct Labor-Hours	Annual Production	Total Direct Labor-Hours
X200	1.8 DLHs per unit	5,000 units	9,000 DLHs
X99	0.9 DLHs per unit	30,000 units	27,000 DLHs
			----- 36,000 DLHs -----

- a. Model X200 requires Rs 72 in direct materials per unit, and model X99 requires Rs 50.
- b. The direct labor rate is Rs 10 per hour.
- c. The company has always used direct labor-hours as the base for applying manufacturing overhead cost to products.
- d. Model X200 is more complex to manufacture than model X99 and requires the use of special equipment.
- e. Because of the special work required in (d) above, the company is considering the use of activity-based costing to apply manufacturing overhead cost to products. Three activity cost pools have been identified as follows:

Activity Cost Pool	Activity Measure	Estimated Total Cost	Estimated Total Activity		
			X200	X99	Total
Machine setups	Number of setups	Rs 60,000	50	100	150
Special processing	Machine-hours	180,000	12,000	0	12,000
General factory	Direct labor-hours	1,260,000	9,000	27,000	36,000
		----- 1,900,000 -----			

Required:

1. Assume that the company continues to use direct labor-hours as the base for applying overhead cost to products. Compute the unit product cost of each model.
2. Assume that the company decides to use activity-based costing to apply overhead cost to products, compute the unit product cost of each model.
3. Explain why overhead cost shifted from the high-volume model to the low-volume model under activity-based costing.

Question B2. SK Limited makes and sells a single product 'Jay' for which the standard cost is as follows:

		Rs per unit
Direct materials	4 kilograms at Rs 12.00 per kg	48.00
Direct labour	5 hours at Rs 7.00 per hour	35.00
Variable production overhead	5 hours at Rs 2.00 per hour	10.00
Fixed production overhead	5 hours at Rs 10.00 per hour	50.00

The variable production overhead is deemed to vary with the hours worked.

Overhead is absorbed into production on the basis of standard hours of production and the normal volume of production for the period just ended was 20 000 units (100 000 standard hours of production).

For the period under consideration, the actual results were:

		18 000 units
		Production of 'Jay' (Rs)
Direct material used –	76 000 kg at a cost of	836 000
Direct labour cost incurred –	for 84 000 hours worked	604 800
Variable production overhead incurred		172 000
Fixed production overhead incurred		1 030 000

You are required

- to calculate and show, by element of cost, the standard cost for the output for the period;
- to calculate and list the relevant variances in a way which reconciles the standard cost with the actual
- to comment briefly on the usefulness to management of statements such as that given in your answer to (b) above.

Question B3. Wollongong wishes to calculate an operating budget for the forthcoming period. Information regarding products, costs and sales levels is as follows:

Product	A	B
Materials required		
X (kg)	2	3
Y (litres)	1	4
Labour hours required		
Skilled (hours)	4	2
Semi-skilled (hours)	2	5
Sales level (units)	2000	1500
Opening stocks (units)	100	200

Closing stock of materials and finished goods will be sufficient to meet 10% of demand. Opening stocks of material X was 300 kg and for material Y was 1000 litres. Material prices are Rs 10 per kg for material X and Rs 7 per litre for material Y. Labour costs are Rs 12 per hour for the skilled workers and Rs 8 per hour for the semi skilled workers.

Required:

Produce the following budgets:

- production (units);
- materials usage (kg and litres);
- materials purchases (kg, litres and Rs); and
- labour (hours and Rs).

SECTION – C

Shortflower Ltd currently publish, print and distribute a range of catalogues and instruction manuals. The management have now decided to discontinue printing and distribution and concentrate solely on publishing.

Longplant Ltd will print and distribute the range of catalogues and instruction manuals on behalf of Shortflower Ltd commencing either at 30 June or 30 November. Longplant Ltd will receive Rs. 65 000 per month for a contract which will commence either at 30 June or 30 November.

The results of Shortflower Ltd for a typical month are as follows:

	Publishing (Rs. 000)	Printing (Rs.000)	Distribution (Rs. 000)
Salaries and wages	28	18	4
Materials and supplies	5.5	31	1.1
Occupancy costs	7	8.5	1.2
Depreciation	0.8	4.2	0.7

Other information has been gathered relating to the possible closure proposals:

(i) Two specialist staff from printing will be retained at their present salary of Rs. 1500 each per month in order to fulfil a link function with Longplant Ltd. One further staff member will be transferred to publishing to fill a staff vacancy through staff turnover, anticipated in July. This staff member will be paid at his present salary of Rs. 1400 per month which is Rs. 100 more than that of the staff member who is expected to leave. On closure all other printing and distribution staff will be made redundant and paid an average of two months redundancy pay.

(ii) The printing department has a supply of materials (already paid for) which cost Rs. 18 000 and which will be sold to Longplant Ltd for Rs. 10 000 if closure takes place on 30 June. Otherwise the material will be used as part of the July printing requirements. The distribution department has a contract to purchase pallets at a cost of Rs. 500 per month for July and August. A cancellation clause allows for non-delivery of the pallets for July and August for a one-off payment of Rs. 300.

Non-delivery for August only will require a payment of Rs. 100. If the pallets are taken from the supplier Longplant Ltd has agreed to purchase them at a price of Rs. 380 for each month's supply which is available. Pallet costs are included in the distribution material and supplies cost stated for a typical month.

(iii) Company expenditure on apportioned occupancy costs to printing and distribution will be reduced by 15% per month if printing and distribution departments are closed. At present, 30% of printing and 25% of distribution occupancy costs are directly attributable costs which are avoidable on closure, whilst the remainders are apportioned costs.

(iv) Closure of the printing and distribution departments will make it possible to sub-let part of the building for a monthly fee of Rs. 2500 when space is available.

(v) Printing plant and machinery has an estimated net book value of Rs. 48 000 at 30 June. It is anticipated that it will be sold at a loss of Rs. 21 000 on 30 June. If sold on 30 November the prospective buyer will pay Rs. 25 000.

(vi) The net book value of distribution vehicles at 30 June is estimated as Rs. 80 000. They could be sold to the original supplier at Rs. 48 000 on 30 June. The original supplier would purchase the vehicles on 30 November for a price of Rs. 44 000.

Required:

Using the above information, prepare a summary to show whether Shortflower Ltd should close the printing and distribution departments on financial grounds on 30 June or on 30 November. Explanatory notes and calculations should be shown. Ignore taxation.