

Paper 6205: MANAGEMENT ACCOUNTING

Time: 3 Hours

Maximum Marks: 50

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt all questions. Make suitable assumptions wherever necessary.

Q.1 Answer the following:

- I.** The following are cost data for three alternative ways of processing work cases in an office system:

	A Manual (Rs.)	B Semi-Automatic (Rs.)	C Fully Automatic (Rs.)
Total fixed cost per month	3,000	9,000	25,000
Variable Cost per case	48	28	8

Calculate cost indifference points. Interpret your results. State for what volumes of cases will you prefer each of A, B and C. [4]

- II.** A and B are two customers of XYZ Electronics Ltd., a manufacturer of audio players:

Selling price per unit is Rs. 5,400. Its cost of production per unit is Rs. 4,420

Additional costs are:

Order Processing Cost: Rs. 2,000 per order .

Delivery Costs: Rs. 3,500 per delivery

Details of customers A and B for the period are given below:

	Customer A	Customer B
Audio Players purchased (no.)	350	500
No. of orders	5 (each of 70 units)	10 (each of 50 units)
No. of deliveries	5	0

The company's policy is to give a discount of 5% on the selling price on orders for 50 units or more, and to further give 8% discount on the undiscounted selling price if a customer uses his own transport to collect the order. Assume that production levels are not altered by these orders.

You are required to analyse the profitability by comparing profit per unit for each customer. Comment on the discount policy on delivery. [6]

OR

Q.1 Answer the following:

- I.** A company is planning a new product. Market research information suggests that 40,000 units of product can be sold at the maximum of Rs. 25 per unit. The company seeks a minimum mark up of 25% on product cost. It is estimated that the lifetime costs of product will be as follows:

- 1) Research and development, design costs Rs. 1,50,000
- 2) Manufacturing costs are Rs. 16 per unit
- 3) End of life costs Rs. 70,000
- 4) Promotion and capacity costs, Rs. 20,000

Should the product be manufactured? [4]

- II.** State the most appropriate pricing policy to be adopted in the following independent situations:

- A. Modern patented drug entering the market
 B. The latest version of a mobile phone is being launched by the established, financially strong company
 C. An established company has recently entered the stationery market segment and launched good quality paper for printing at home and office
 D. A car manufacturer is launching an innovative, technologically advanced car in the highly priced segment. [4]
- III.** "Cost is not the only criteria for deciding in favour of shut down" Briefly explain [2]

Q.2 Answer the following:

I. Alpha Ltd. uses standard costing system for manufacturing its single 'APS'. Standard cost card is as follows:

	Per unit (Rs.)
Selling Price	120
Direct Material (1 kg per unit)	20
Direct Labour (6 hours @ Rs. 8 per hour)	48
Variable Overheads	24
Contribution	28

Actual and budgeted activity levels in units for the month of September are:

	Budget	Actual
Sales	50,000	51,200
Production	50,000	52,000

Actual sales revenue and variable costs for the month of September are given as under:

Sales	Rs. 61,33,760
Direct Material	Rs. 10,65,600
Direct Labour (3,00,000 hours)	Rs. 24,42,000
Variable Overheads	Rs. 12,28,000

Calculate:

- A. Direct Labour Rate Variance
 B. Direct Labour Efficiency Variance
 C. Sales Volume Variance
 D. Sales Price Variance
 E. Comment on your findings in (I) and (II) above [8]

II. The budgeted cost data of a product manufactured by XYZ Co. Ltd. is furnished as below:

Budgeted Units to be produced: 2,00,000

Variable Cost (Rs.) : Rs. 32 per unit

Fixed cost (Rs.) : Rs. 16,00,000

It is proposed to adopt cost plus pricing approach with a mark-up of 25% on full budgeted cost basis. However, research by the marketing department indicates that demand of the product in the market is price sensitive. The likely market responses are as follows:

Selling Price (Rs. Per Unit)	44	48	50	56	60
Annual Demand (Units)	1,68,000	1,52,000	1,40,000	1,28,000	1,08,000

Analyse the above situation and determine the best course of action. [4]

III. X Ltd. makes a single product with the following details:

Description	Current Situation	Proposed Change
Selling Price (Rs. Per unit)	10	
Cost Price (Rs. Per unit)	5	
Present number of set ups per production period (before each production run, set up is done)	42	
Cost per set up (Rs.)	450	Decrease by Rs. 90
Production units per run	960	1,008
Engineering hours for production period	500	422

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10

10

Cost per engineering hour (Rs.)	10
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The company has begun Activity Based Costing of fixed costs and has presently identified two cost drivers, viz. production runs and engineering hours. Of the total fixed costs presently at Rs. 96,000, after the above, Rs. 72,100 remains to be analysed. There are changes as proposed above for the next production period for the same volume of output.

- A. How many units and in how many production runs should X Ltd. produce in the changed scenario in order to break-even?
- B. Should X Ltd. continue to break up the remaining fixed costs into activity based costs? Why? [8]

Q.3 Answer the following:

I. Read the following case and answer the questions given in end:

When X arrived at her office at Sanders Motor parts Division on June 4, 2014, she was pleased to find the monthly performance report for May 2014 on her desk. Her job as division controller was to analyze results of operations each month and to prepare a narrative report on operations that was to be forwarded to the corporate headquarters. The report provided a chance to find out how well division management had compensated for the recent loss of a major customer contract.

Present Situation: Sanders Motor parts manufactured electric motors of a single design that were sold to household appliance manufacturers. Originally a family-owned business, the division had been acquired in late 2013 by the holding company of which Sanders Motor parts was the wholly owned subsidiary. Few changes had been made in either the company's operating procedures or systems because holding company had chosen to delay changing procedures and systems until it was able to observe how well those already in use at Waltham functioned. In April, X was transferred from the corporate headquarters controller's office to Sanders Motor parts. She was joined in late May by Y, who was to be the new division manager.

Because of the lost contract, X had asked the plant accountant to assemble the May figures as quickly as possible, but she was amazed that they were ready so soon. At headquarters, monthly results had rarely been available until several days after the end of each month.

The division had prepared a budget for 2014 based on estimated sales and production costs. Because sales were not subject to seasonal fluctuations, the monthly budget was merely one-twelfth of the annual budget. No adjustments had been made to the May budget when the contract was lost in April.

Performance Report: A glance at the performance report confirmed X's worst fears. Instead of a budgeted profit of \$91,200, the report showed the division had lost \$7,200 in May. Even allowing for the lost volume, she had expected a better showing than indicated by the performance report. The plant accountant had attached the following memo to the report:

X: As promised, here is the performance report for May. (I told you smaller is better; we'll show headquarters how efficient our plant accounting department is!) I am sure you'll find the bottom line as disappointing as I did, but plant performance really looks good, and the crews there may deserve our compliments. Note how they are at or under budget on every single cost except for supervision. I suspect that the unfavorable variance in supervision was caused directly by the work involved in controlling other costs. The other data you requested are as follows:

1. There were no beginning and ending inventories in work in progress or finished goods.
2. Per unit standard costs used in budgeting this year were:

Direct material	\$ 6
Direct labor	16

3. We are still using two hours per unit as standard labor time.
4. Actual material prices have been 5% less than expected.
5. Actual direct labor costs have been \$8.20 per hour due to the increase in medical benefits granted last January.

A copy of the performance report is shown as **Exhibit 1**.

Questions

1. Using budget data, how many motors would have to be sold for Sanders Motor parts Division to break even?
2. Using budget data, what was the total expected cost per unit if all manufacturing and shipping overhead (both variable and fixed) was allocated to planned production? What was the actual per unit cost of production and shipping?
3. Comment on the performance report and the plant accountant's analysis of results. How, if at all, would you suggest the performance report be changed before sending it on to the division manager and holding company headquarters?
4. Prepare your own analysis of the Sanders Division's operations in May. Explain in as much detail as possible why income differed from what you would have expected.

Exhibit 1: Performance Report May 2014

	Budget	Actual	Variance	
Units	18,000	14,000	4,000	
Sales	\$864,000	\$686,000	\$178,000	U
<i>Variable manufacturing costs:</i>				
Direct material	\$108,000	\$ 85,400	\$ 22,600	F
Direct labor	288,000	246,000	42,000	F
Indirect labor	57,600	44,400	13,200	F
Idle time	14,400	14,200	200	F
Cleanup time	10,800	10,000	800	F
Miscellaneous supplies	5,200	4,000	1,200	F
Total variable manufacturing cost	\$484,000	\$404,000	\$ 80,000	F
<i>Variable shipping costs</i>	\$ 28,800	\$ 28,000	\$ 800	F
Total variable costs	\$512,800	\$432,000	\$ 80,800	F
Contribution margin	\$351,200	\$254,000	\$ 97,200	U
<i>Non-variable manufacturing costs:</i>				
Supervision	\$ 57,600	\$ 58,800	\$ 1,200	U
Rent	20,000	20,000	--	
Depreciation	60,000	60,000	--	
Other	10,400	10,400	--	
Total non-variable manufacturing costs	\$148,000	\$149,200	\$ 1,200	U
<i>Selling and administrative costs</i>	112,000	112,000	--	
Total non-variable and programmed costs	\$260,000	\$261,200	\$ 1,200	U
Operating income (loss)	91,200	(7,200)	(98,400)	U

[15]

[5]

- II.** Explain and illustrate a job card.