CMA JUNE, 2020 EXAMINATION
PROFESSIONAL LEVEL-II
SUBJECT: 202. MANAGEMENT ACCOUNTING

Time: Three hours Full Marks: 100

- All questions are to be attempted.
- Show computations, where necessary.
- Answer must be brief, relevant, neat and clean.
- Start answering each question from a fresh sheet.

Q. No. 1

(a) How JIT method reduce or eliminate the difference in reported NOI between AC & DC method.

(b) Give three examples of cost drivers of following business functions in the value chain:

(i) Research and development.
(ii) Design of products, services and processes.
(iii) Marketing.
(iv) Distribution.
(v) Customer service.

(c) "I thought that new, automated plant was supposed to make us more efficient and therefore more profitable," exclaimed Marla Wamer, President of Visic Company." Just look at these monthly income statements for the second quarter. Sales have risen steadily month by month. But income is going in the opposite direction, and even show a loss for june! Can someone explain what's happening? The statements to which Ms. Warner was referring are given below:

VISIC COMPANY
Monthly Income Statements
For the Second Quarter

	April	**May**	**June**
Sales (at $25)	$ 1,500,000	$1,625,000	$ 1,750,000
Less cost of goods sold:			
Beginning Inventory:	70,000	280,000	350,000
Cost applied to production:			
Variable manufacturing costs			
(at $6 per unit)	450,000	420,000	300,000
Fixed manufacturing overhead	600,000	560,000	400,000
Cost of goods manufactured	1,050,000	980,000	700,000
Goods available for sale	1,120,000	1,260,000	1,050,000
less ending inventory	280,000	350,000	70,000
Cost of goods sold	840,000	910,000	980,000
Under applied (or over applied)			
overhead cost	(40,000)	-	160,00
Adjusted cost of goods sold	800,000	910,000	1,140,000
Gross margin	700,000	715,000	610,000
Less selling and administrative expenses	620,000	665,000	710,000
Net operating income (loss)	$ 80,000	$ 50,000	$ (100,000)

"Fixed costs associated with the new plant are very high," replied Brian Hauber, the controller. "We are just following good absorption costing, as we have for years,"

"May be the costing method is the problem." responded Teri Carlyle, the financial vice president, " A management development seminar I just attended suggested that the contribution approach, with variable costing, is the best way to report profit data to management."

Production and sales data for the second quarter follow:

	April	May	June
Production in units	75,000	70,000	50,000
Sales in units	60,000	65,000	70,000

Q. No. 1(Cont'd...)

Additional information about the company's operations is given below:

(a) Five thousand units ware in inventory on April 1.

(b) Fixed manufacturing overhead costs total $ 1,680,000 per quarter and are incurred evenly thought the quarter. The fixed manufacturing overhead cost is applied to units of product on the basis of a budgeted production volume of 70,000 units per month.

(c) Variable selling and administrative expenses are $9 per unit sold. The remainder of the selling and administrative expenses on the statements above are fixed.

(d) The Company uses a FIFO inventory flow assumption. Work in Process inventorics are insignificant and can be ignored.

"We had to build inventory early in the year in anticipation of a strike in june, said mr. Hauber. "Since the union settled without a strike, we then had to cut back production in June in order to work off the excess inventories, The income statements you have are completely accurate.

Required:

(1) Prepare an income statement for each month using the contribution approach with variable costing.

(2) Reconcile the variable costing and absorption costing net operating income (loss) figures for each month. Show all computations and show how you have derived each figure used in your reconciliation.

(3) Assume that the company had decided to introduce JIT inventory method at the beginning of June, how many units have been produced during June under JIT?

[Marks: 3+5(4+4+4) = 20]

Q. No. 2

(a) Discuss the various reports provided by Cost Accounting department.

(b) What is the impact of transfer pricing on income? Discuss.

(c) A large Company is organized into several manufacturing divisions. The policy of the Company is to allow the divisional Managers to choose their sources of supply and when buying from or selling to sister divisions, to negotiate the prices just as they will for outside purchase or sales.

Division X buys all of its requirement of its main raw material R from Division Y. The full manufacturing cost of R for Division Y is Tk.88 per kg. at normal volume.

Till recently, Division Y was willing to supply R to Division X at a transfer price of Tk.80 per kg. The incremental cost of R for Division Y is Tk.76 per kg. Since division Y is now operating at its full capacity, it is unable to meet the outside customers' demand for R at its market price of Tk.100 per kg. Division Y, therefore, threatened to cut off supplies to Division X unless the latter agrees to pay the market price for R.

Division X is resisting the pressure because its budget based on the consumption of 1,00,000 kg. per month at a price of Tk.80 per kg. is expected to yield a profit of Tk.25,00,000 per month and so a price increase to Tk.100 per kg. will bring the Division X close to break-even point.

Division X has even found an outside source for a substitute material at a price of Tk.95 per kg.

Although the substitute material is slightly different from R, it would meet the needs of Division X. Alternatively, Division X is prepared to pay Division Y even the manufacturing cost of Tk.88 per kg.

Q. No. 2(Cont'd...)

Required:

(i) Using each of the transfer price of Tk.80, Tk.88, Tk.95 and Tk.100, show with supporting calculation, the financial results as projected by the:

(a) Manager of Division X

(b) Manager of Division Y

(c) Company

(ii) Comment on the effect of each transfer price on the performance of the Managers of Division X and Division Y.

(iii) If you were to make a decision in the matter without regard to the views of the individual Divisional Managers, where should Division X obtain its materials from and at what price.

[Marks: 4+4+(4+4+4) = 20]

Q. No. 3

(a) What is the role of a Management Accountant in cost control and cost reduction?

(b) "Variable costs and differential costs mean the same thing" Do you agree?

(c) Bronson Company manufactures a variety of ballpoint pens. The company has just received an offer from an outside supplier to provide the ink cartridge for the company's Zippo pen line, at a price of $0.48 per dozen cartridges. The company is interested in this offer, since its own production of cartridges is at capacity.

Bronson Company estimates that if the supplier's offer were accepted, the direct labor and variable overhead costs of the Zippo pen line would be reduced by 10% and the direct materials cost would be reduced by 20%.

Under present operations, Bronson Company manufactures all of its own pens from start to finish. The Zippo pens are sold through wholesalers at $4 per box. Each box contains one dozen pens. Fixed overhead costs charged to the Zippo pen line total $50,000 each year. (The same equipment and facilities are used to produce several pen lines.) The present cost of producing one dozen Zippo pens (one box) is given below:

Direct materials.....	$1.50
Direct labor	1.00
Manufacturing overhead.....	0.80*
Total cost.....	$3.30

*Includes both variable and fixed manufacturing overhead, based on production of 100,000 boxes of pens each year.

Required:

(i) Should Bronson Company accept the outside supplier's offer? Show computations.

(ii) What is the maximum price that Bronson Company should be willing to pay the outside supplier per dozen cartridges?

(iii) Due to the bankruptcy of a competitor, Bronson Company expects to sell 150,000 boxes of Zippo pens next year. As stated above, the company presently has enough capacity to produce the cartridges for only 100,000 boxes of Zippo pens annually. By incurring $30,000 in added fixed cost each year, the company could expand its production of cartridges to satisfy the anticipated demand for Zippo pens. The variable cost per unit to produce the additional cartridges would be the same as at present. Under these circumstances, should all 150.000 boxes be purchased from the outside supplier, or should some of the 150,000 boxes be made by Bronson? Show computations to support your answer.

(iv) What qualitative factors should Bronson Company consider in determining whether it should make or buy the ink cartridges?

[Marks: 3+3+(3+2+7+2) = 20]

Q. No. 4

(a) "As a practical matter, planning and control mean exactly the same thing" Do you agree? Explain.

(b) Discuss the role of budgeting in planning and control.

(c) ABC Ltd. makes two types of polish – one for floor and one for cars. It sells both types to industrial users only, in one-liter containers. The specifications for the two products per patch of 100 liters are:

Materials	Floor Polish	Car Polish
Delta	120 liters	100 liters
Gamma	20 kg	10 kg
Containers – Cost per 100 liters.	Tk. 100	Tk. 100
Direct labor		
Manufacturing	12 man-hours	16 man-hours
Primary Packing	5 man-hours	5 man-hours

During the six months to end of 30th September the company expects to sell 15,000 liters of floor polish at Tk.9 per liter and 25,000 liters of car polish at Tk.7 per liters. Materials are expected to cost Tk. 1 a liter for Delta and Tk.8 a kg. for Gamma.

Manufacturing wages in the industry look like being stable at Tk. 6 per hour and packing wages at Tk. 4per hour throughout the period.

Flexible overhead expenses budgets are operated for manufacturing and packing departments based on the number of man-hours worked. These budgets for six months to end of September are:

Manufacturing Department		Primary Packing Department	
	Tk.		Tk.
5,000 man-hours	40,000	1,700 man-hours	26,000
6,000 man-hours	50,000	1,900 man-hours	28,000
7,000 man-hours	60,000	2,100 man-hours	30,000
8,000 man-hours	80,000	2,300 man-hours	32,000

General administration overhead is budgeted at Tk. 37,000. At the beginning of the period 1st April packed stocks will be:

Floor Polish 2,000 liters

Car Polish 3,000 liters

By end of the period 30th September, it is desired to maintain the packed stocks of the two products at 3,000 liters and 4,000 liters respectively. The following are required:

Required:

(i) A statement of the standard prime cost per 100 liters of each product.

(ii) A sales and production budget (in quantities) for the six months to 30th September.

(iii) A profit forecast for the period. Show separate gross profit for the two products but do not attempt to allocate overheads between them. No overheads are included in stock valuation.

[Marks: 3+3+(4+5+5) = 20]

Q. No. 5

(a) How cost object's costs are tracing? Does the traceable cost directly charge to the cost object? How indirect costs are assigned to the cost object?

(b) Teri Hall has recently opened sheer Elegance, Inc., a store specializing in fashionable stockings. Ms. Hall has just completed a course in managerial accounting and she believes that she can apply certain aspects of the course to her business. She is particularly interested in adopting the cost-volume-profit (CVP) approach to decision making. Thus, she has prepared the following analysis:

Sales price per pair of stocking	$ 2.00
Variable expense per pair of stockings	0.80
Contribution margin per pair of stockings	$ 1.20
Fixed expenses per year:	
Building rental	$ 12,000
Equipment depreciation	3,000
Selling	30,000
Administrative	15,000
Total Fixed expenses	$60,000

Required:

(1) How many pairs of stocking must be sold to break even? What does this represent in total dollar Sales?

(2) How many pairs of stockings most be sold to earn a $9,000 target profit for the first year?

(3) Ms. Hall now has one full time and one part-time salesperson working in the store. It will cost her an additional $ 8,000 per year to convert the part time position to a full time position. Ms. Hall believes that the change would bring in an addition $ 20,000 is sales each year. Should she convert the position?

(4) Refer to the original data. Actual operating results for the first year are as follows:

Sales	$ 125,000
Less Variable Expenses	50,000
Contribution margin	75,000
Less fixed expenses	60,000
Net operating income	$ 15,000

(a) What is the store's degree of operating leverage?

(b) Ms. Hall is confident that with some effort she can increase sales by 20% next year. What would be the expected percentage increase in net operating income? Use the degree of operating leverage concept to compute your answer.

[Marks: 4+(4+4+4+4) = 20]

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