ICMAB
THE INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF BANGLADESH

CMA JUNE, 2020 EXAMINATION
MANAGEMENT LEVEL
SUBJECT: P2. PERFORMANCE MANAGEMENT

Time Allocated: Three hours | Total Marks: 100

Instructions to Candidates

There are three sections (that is A, B & C) in this paper. You are required to answer ALL questions.

Answers should be properly structured, relevant and computations need to be shown wherever necessary.

You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or sub-questions).

ALL answers must be written in the answer book. Answers written on the question paper will not be submitted for marking.

Start answering each question from a fresh sheet. Your answers should be clearly numbered with the sub-question number then ruled off, so that the markers know which sub-question you are answering.

Section	No of questions in the Section	No of sub-questions in the Section	Marks allocation
A	01	08	20%
B	01	05	30%
C	02		50%

TURN OVER

SECTION A – 20 MARKS
This section consists of 1 question and 8 sub-questions.
You are advised to spend no longer than 36 minutes on this section. Section will carry 20 marks and one sub-question will carry 2.5 marks each.

Question 01

(a) Describe the main features of Economic value added.
(2 ½ Marks)

(b) State the 4 perspectives of the Balanced Scorecard.
(2 ½ Marks)

(c) Explain two disadvantages of "total cost plus" pricing.
(2 ½ Marks)

(d) "All future costs are relevant". Do you agree? Why?
(2 ½ Marks)

(e) Give two examples of non-financial measures of customer satisfaction relating to quality.
(2 ½ Marks)

(f) Define Learning curve. State the uses of Learning curve.
(2 ½ Marks)

(g) How quality cost is relevant with TQM? Discuss shortly.
(2 ½ Marks)

(h) What is internal failure cost? Explain with example.
(2 ½ Marks)

(2 ½ Marks × 8 Questions = 20 Marks)

END OF SECTION A

SECTION B Starts on page 3

Section B– 30 MARKS
This section consists of 1 question and 5 sub-questions.
You are advised to spend no longer than 9 minutes on each sub-question in this section. Section will carry 30 marks and one sub-question will carry 6 marks each.

Question 02

(a) The new Manager of Pusty Manufacturing has asked for information about the operations of the firm from last year. The Manager has given the following information, but with some data missing.

Total sales revenue	?
Number of units produced and sales	5,00,000 units
Selling price	?
Operating income	Tk.18,00,000
Total investment in assets	Tk.2,25,00,000
Variable cost per unit	Tk.40
Fixed cost for the year	Tk.25,00,000

Required: Find (a) total sales revenue,
(b) selling price,
(c) rate of return on investment and
(d) mark-up percentage on full cost for this product.

[Marks: 6]

(b) Moonlit Ltd. produces three products A, B and C from the same manufacturing facilities. The cost and other details of these products are as follows:

Product	A	B	C
Selling price/unit (Taka)	200	160	100
Variable cost/unit(Taka)	120	120	40
Maximum production per month(units)	5,000	8,000	6,000
Maximum demand per month(units)	2,000	4,000	2,400

Fixed monthly expenses is Tk. 2,76,000.
The processing hours cannot be increased beyond 200 hours per month.
You are required to compute the most profitable product-mix.

[Marks: 6]

(c) Dhaka Company Limited manufactures automobile accessories and parts. The following are the total costs of processing 1,00,000 units.

Direct material costs	Tk.50,00,000
Direct labour costs	Tk.80,00,000
Variable factory overhead	Tk.60,00,000
Fixed factory overhead	Tk.50,00,000

The purchase price of the component is Tk.220. The fixed overhead would continue to be incurred even when the component is bought from outside, although there would have been reduction to the extent of Tk.20,00,000.

Required:

(i) Should the part be made or bought considering that the present facility when released following a buying decision would remain idle.

(ii) In case the released capacity can be rented out to another manufacturer for Tk.15,00,000, what should be the decision?

[Marks: 6]

SECTION B Continues on page 4

(d) Pool Group has two divisions that operate as profit centres. Each centre sells similar products, but to different segments of the market.

Division P makes product P29 which it sells to external customers for $ 150. Variable costs of production are $ 45 per unit. The maximum annual sales demand for P29 is 5,000 units, although Division P has capacity for 7,000 units. Increasing output from 5,000 to 7,000 each year would result in additional fixed cost expenditure of $8,000

The manager of Division L has seen an opportunity to sell an amended version of Product P29 to its own customers, and is interested in buying 2,000 units each year to re-sell externally at $ 90 per unit. The costs of amending Product P29 for sale as Product L77, would be $25 per unit. However, the manager of Division L will not pay more than $40 per unit of Product P29. He argues that Division P will benefit from lower fixed costs per unit by working at full capacity. The manager of Division P refuses to sell at a price that does not cover the division's incremental costs.

Required:

Suggest a pricing arrangement with justification that might overcome the disagreement between the two divisional managers.

[Marks: 6]

(e) The Laxmi Repair Shop repairs and services machine tools. A summary of its cost (by activity) for April-June is as follows:

(a)	Materials and labor for servicing machine tools	$ 8,00,000
(b)	Rework cost	75,000
(c)	Expediting costs caused by work delays	60,000
(d)	Materials-handling costs	50,000
(e)	Materials procurement and inspection costs	35,000
(f)	Preventive maintenance of equipment	15,000
(g)	Breakdown maintenance of equipment	55,000

Required:

(1) Classify each cost as value-added, non value-added or in the gray area in between.

(2) For any cost classified in the gray area, assume 65% of it is value-added and 35% is nonvalue-added. How much of the total of all seven costs is value – added and how much is nonvalue-added.

[Marks: 6]

END OF SECTION B

SECTION C Starts on page 5

Section C– 50 MARKS
This section consists of 2 questions.
You are advised to spend no longer than 45 minutes on each question in this section. Section will carry 50 marks(each question carries 25 marks) and allocation of marks for each sub-question is indicated next to the sub-question.

Question 03
SONY Company produces televisions and components for televisions. The company has two divisions, Division X and Division Y. Division X manufactures components for televisions that it sales to division Y and to external customers. Division Y, on the other hand uses five of the components to manufacture each of the televisions that it sells directly to external customers.

Division X

Budgeted variable manufacturing cost per component:	
Direct material	Tk.14
Direct labour	18
Variable overhead	12

The following information relating to next year is also available:

Fixed costs	Tk.5,60,000
Production capacity	1,75,000 components
External demand	1,50,000 components
Potential demand from Division Y	80,000 components

The anticipated external market price for a component is Tk.50

Division Y

Sales price	Tk. 450
Budgeted variable manufacturing cost per television:	
Direct materials	40
Direct labour	62
Variable overhead	16

In addition to the variable cost above, each television produced needs five components. Fixed costs are budgeted to be Tk.14,60,000 for next year. Annual sales of televisions are expected to be 16,000 units.

Transfer price policy:

Transfer prices are set at opportunity cost.
Division X must satisfy the demand of Division Y before selling components externally.
Division Y is allowed to purchase components from Division X or from external suppliers.

Required:

(a) Assuming that Division Y buys all the components it requires from Division X. Produce a profit statement for each division detailing sales and costs, showing external sales and inter company transfers separately where appropriate.

(b) A specialist external supplier has approached Division Y and offered to supply 80,000 components at a price of Tk.42 each. The components fulfill the same function as those manufactured by Division X. The manager of Division Y has accepted the offer and has agreed to buy all the components it requires from this supplier.
   (i) Prepare a revised profit statement for each division and for the total SONY Company.

SECTION C Continues on page 6

(ii) Division X has just received an enquiry from a new customer for the production of 25,000 components. The manager of Division X requires a total profit for the year for the division of Tk.4,50,000. Calculate the minimum price per component to sell the 25,000 components to the new customer that would enable the manager of Division X to meet the profit target.

(c) Discuss the potential implications for SONY of outsourcing the production of one type of component that it manufactures.

[Marks: 7+(6+4)+8 = 25]

Question 04

Justa Corporation produces and sells three products, A, B and C. The three products are sold in a local market and in regional market. At the end of the first quarter of the current year, the following income statement was prepared

	Total	Local	Regional
Sales……	$1300,000	$1000,000	300,000
Cost of goods sold……..	1010,000	775,000	235,000
Gross profit……..	$290,000	$225,000	$65,000
Marketing expense……	$105,000	$ 60,000	$45,000
Administrative expense……	52,000	40,000	12,000
	$ 157,000	$ 100,000	$ 57,000
Operating income……	$133,000	$125,000	$ 8,000

Management has expressed special concern with the regional market because of the extremely poor return on sales. This market was entered a year ago because of excess capacity. It was originally believed that the return on sales would improve with time, but after a year, no noticeable improvement can be seen from the results as reported in the quarterly statement.
In attempting to decide whether to eliminate the regional market, the following information has been gathered.

	A	B	C
Sales…….	$500,000	$400,000	$400,000
Variable manufacturing expense as a Percentage of sales……	60%	70%	60%
Variable marketing expense as a percentage of sales.....	3%	2%	2%

	Sales by markets	
Product	Local	Regional
A	$400,000	$100,000
B	300,000	100,000
C	300,000	100,000

All fixed expense is based upon a prorated yearly amount. All administrative expenses and fixed manufacturing expense are common to the three products and the two markets and are fixed for the period, regardless of whether a market is eliminated. Remaining marketing expense is fixed for the period and separable by market. All separable cost and would be eliminated with the dropping of a market.

SECTION C Continues on page 7

Required:

(1) Prepare the quarterly income statement, showing contribution margins by markets. Include a total column, combining the two markets.

(2) Assuming that there are no alternative uses for Justa Corporation's present capacity, should the regional market be dropped? Why or why not?

(3) Prepare the quarterly income statement, showing contribution margin by products.

(4) It is believed that a new product to replace product C Could be ready for sale next year if Justa Corporation decides to go ahead with continued research. The new product could be produced by simply converting equipment presently used in producing product C. This conversion would increase fixed cost by $10,000 per quarter. Calculate the minimum contribution margin per quarter for the new product if Justa Corporation is to be no worse off financially than at present.

[Marks: (10+5+5+5) = 25]

*** End of Question Paper ***