

**CMA JUNE, 2020 EXAMINATION
BUSINESS LEVEL**

SUBJECT: GE 02. FUNDAMENTALS OF MANAGEMENT ACCOUNTING

Time Allocated: Three hours

Total Marks: 100

Instructions to Candidates

You are required to answer ALL questions.

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

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.

No of questions	No of sub-questions	Marks allocation
8	Maximum 03	Question 1- 6 = 10 marks each Question 7- 8 = 20 marks each

TURN OVER

You are advised to spend 18 minutes on Question 1- 6 (10 marks per each) and 36 minutes on Question 7- 8 (20 marks per each).

QUESTION 1

- (a) Consider the following short descriptions. Indicate whether each of the following descriptions more closely relates to a major feature of financial accounting or management accounting:
- (i) Concepts are less sharply defined
 - (ii) Provide internal consulting advice to managers
 - (iii) Has less flexibility
 - (iv) Is characterized by detailed reports
 - (v) Has a future orientation
 - (vi) Bounded by periodicity
 - (vii) Is constrained by accounting standards
 - (viii) Behavioral impact is secondary.
- (b) What is value chain? Draw the value chain of a typical organization.
- (c) How push manufacturing system differs from pull manufacturing system? What is their implications for management accounting?

[Marks: (4+2+4) = 10]

QUESTION 2

- (a) A company manufactures a single product which it sells for Tk.15 per unit. The product has a contribution to sales ratio of 40%. The company's weekly break-even point is sales of Tk.18,000. What would be the profit in a week when 1500 units are sold?
- (b) An organization manufactures a single product which has a variable cost of Tk.36 per unit. The organization's total weekly fixed costs are Tk.81,000 and it has a contribution to sales ratio of 40%. This week it plans to manufacture and sell 5000 units. What is the organization's margin of safety this week (in units)?
- (c) A company has established a budgeted sales revenue for the forthcoming period of Tk.500,000 with an associated contribution of Tk.275,000. Fixed production costs are Tk.137,500 and fixed selling costs are Tk.27,500 calculate BES.

[Marks: (4+3+3) = 10]

QUESTION 3

- (a) What is meant by discretionary fixed Cost and Committee fixed cost? Give examples.
- (b) What is meant by least square regression?
- (c) Maria, an accountant for Golden Jubilee, Inc., has decided to estimate the fixed and variable components associated with the company's repair activity. She has collected the following data for the past 6 months:

Repair Hours	Total Repair Costs (Tk.)
10	800
20	1,100
15	900
12	900
18	1,050
25	1,250

Required:

- (i) Estimate the fixed and variable components for the repair costs using the high-low method. Using the cost formula, predict the cost of repair if 14 hours are used.
- (ii) Estimate the fixed and variable components using the method of least squares. Translate your results into the form of a cost formula, and using that formula, predict the total cost of repairs if 14 hours are used.

[Marks: (2+2+6) =10]

TURN OVER

QUESTION 4

- (a) Arlo's T-shirt Shop only has three costs: T-shirt cost, rent cost on the shop, and utilities cost. Arlo's sells the T-shirt for Tk.14.50 each. Management has prepared the following estimated cost information for next month:

	<i>At 8,000 T-shirts</i>	<i>At 10,000 T-shirts</i>
T-shirt cost.....	Tk.48,000	Tk.60,000
Rent cost.....	Tk.3,600	Tk.3,600
Utilities cost.....	Tk.6,800	Tk.8,300

Assume that all of the activity levels mentioned in this problem are within the relevant range.

Required:

- (i) Calculate what Arlo's should expect for total variable cost if 9,000 T-shirts are sold next month.
- (ii) Prepare Arlo's contribution approach income statement for a monthly sales volume level of 10,000 T-shirts.
- (b) The following are forecasts of sales and purchases for China Grove Company:

	<u>Sales</u>	<u>Purchases</u>
April	Tk.80,000	Tk.30,000
May	90,000	40,000
June	85,000	30,000

All sales are on credit. Records show that 70 percent of the customers pay the month of the sale, 20 percent pay the month after the sale, and the remaining 10 percent pay the second month after the sale. Purchases are all paid the following month at a 2 percent discount. Cash disbursements for operating expenses in June were Tk.5,000.

Required: Prepare a schedule of cash receipts and disbursements for June.

[Marks: (2+4)+4 = 10]

QUESTION 5

- (a) Discuss how establishing standards, benefits the following management functions: performance evaluation and decision making.
- (b) The Auto PLC. uses standards to control the labor time and labor cost in the shop. The standard labor cost for a motor tune-up is given below:

Job	Standard Hours	Standard Rate	Standard Cost
Motor tune-up	2.5	Tk. 9.00	Tk. 22.50

The record showing the time spent in the shop last week on motor tune-up has been misplaced. However, the shop supervisor recalls that 50 tune-ups were completed during the week, and the controller recalls the following variance data relating to tune-ups:

Labor rate variance	Tk. 87 F
Labor spending variance	Tk. 93 U

Required:

- (i) Determine the number of actual labor-hours spent on tune-ups during the week.
- (ii) Determine the actual hourly rate of pay for tune-ups week.

[Marks: (4+3+3) = 10]

TURN OVER

QUESTION 6

- (a) How does a flexible budget based on two cost drivers differs from a flexible budget based on a single cost driver?
- (b) JKL Company has prepared as sales budget of 42,000 finished units for a 3-month period. The company has an inventory of 13,000 units of finished goods on hand at December 31 and has a target finished goods inventory of 15,000 units at the end of the succeeding quarter.
It takes 3 gallons of direct materials to make one unit of finished product. The company has an inventory of 61,000 gallons of direct materials at December 31 and has a target ending inventory of 53,000 gallons at the end of the succeeding quarter. How many gallons of direct materials should the company purchase during 3 months ending March 31?

[Marks: (3+7) = 10]

QUESTION 7

- (a) "Variable costs are always relevant, and fixed costs are always irrelevant". Do you agree? Justify your answer.
- (b) GHI Footwear Company produces plastic sandals in its Injecting Department and sells the sandals Tk. 45 per pair. After injection of the plastics excess plastics are attached with the sandals and it is cut off from sandals to get it proper shape. Yearly it generates 100,000 kg of excess plastics.

These excess plastics can be sold in the local market at the price of Tk.15 per kg. On the other hand company can use these plastics to produce soles used in other shoes. But it requires further process for producing soles. The buying of soles from a sole producing company at the rate of Tk. 28 per pair.

For making sole initially these excess plastics are sent to Grinding Dept. to make it small pieces with 10% normal loss in quantity. Grinding dept. incurs the following cost per kg to grind the plastic.

Direct Materials	2.00
Direct Labor	5.25
Variable Overhead	1.75

Finally it is sent to Injecting Dept. to make soles. Injecting dept. incurs the following costs per pair of sole. 400 gram plastics is required to prepare one pair of sole.

Direct Materials	0.85
Direct Labor	5.25
Variable Overhead	2.25

Both department has excess capacity and further processing will additionally generate overhead recovery (favorable) of Tk. 15,000 in Grinding Dept. 22,000 in Injecting Dept. and the company maintains standard costing system in its accounting operation.

As a management accountant suggest GHI Company whether to sell initially to local market or do further process to produce soles. Justify your answer with detail calculations.

[Marks: (4+16) = 20]

TURN OVER

QUESTION 8

MNO Hospital is considering the purchase of a Biochemistry Analyzer machine for Tk. 75,000. It is expected to have a useful life of 4 years with no terminal disposal value. The hospital management estimates the following savings in the operating costs

Year	Amount
1	37,000
2	27,000
3	22,000
4	<u>18,000</u>
Total	<u>104,000</u>

Hospital uses a required rate of return of 15% in its capital budgeting decisions and maintains the entire investment is to be paid back by 3 years (discounted). Ignore income taxes in your analysis. Assume all cash flows occur at year end except for initial investment amounts.

Required:

Calculate the followings for the machine

- (i) Net present value
- (ii) Payback period
- (iii) Discounted payback period
- (iv) Internal rate of return
- (v) Make suggestion whether the investment is to be made or not

[Marks: 20]

END OF QUESTION PAPER