PGDM, 2019-20
Managerial Accounting
IB - 202
Trimester –II, End-Term Examination: December 2019

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.** All other instructions on the reverse of Admit Card should be followed meticulously. Please carry a non-programmable calculator.

Section: A (30 Marks).

Attempt all the 3 questions, each question carries 10 marks.

1. Pieco Engg. Co. has received an once off export order for its sole product that would require the use of half of the factory's total capacity, which is estimated at 4 lakh units p.a. The condition of the export order is that it has to be accepted in full acceptance of part quantity is not allowed.
The factory is currently operating at 60% level to meet the demand of its domestic customers. As against the current price of Rs. 6/unit, the export offer is Rs. 4.70/unit, which is less than the total cost of current production.

The cost breakdown is given below:

(Rs. Per Unit)

Dir. Mat	2.50
Dir. Labour	1.00
Var. Expenses	0.50
Fixed OH	1.00

The co. has the following options:

a) Accept the export order and cut back domestic sales as necessary.

b) Remove the capacity constraint by installing necessary balancing equipment and also by working overtime to meet both domestic and export demand. This will increase fixed OH by Rs. 15000 annually, and additional cost for overtime work will amount to Rs. 40000 for the year.

c) Appoint a sub contractor to manufacture the additional requirement and meet the domestic and export requirement in full by supplying raw materials , paying a conversion charge @ Rs. 2 per unit and appointing a supervisor at a salary of Rs. 3000 p.m for checking the quality of the product and controlling operations at the mfg. unit

d) Refuse the order.

Required:

i) A statement of costs and profits under each of the above four options.

ii) Your recommendations, with reasons, as to which of these options the co. should decide upon. **(CILO 2)**

OR

1. The Incredible Donut owns and operates six doughnut outlets in and around Kansas City. You are given the following corporate budget data for next year:

Revenues	$10,400,000
Fixed costs	$ 2,100,000
Variable costs	$ 7,900,000

Variable costs change based on the number of doughnuts sold.

Compute the budgeted operating income for each of the following deviations from the original budget data. (Consider each case independently.)

Required:

1. An 11% increase in contribution margin, holding revenues constant
2. An 11% decrease in contribution margin, holding revenues constant
3. A 4% increase in fixed costs
4. A 4% decrease in fixed costs
5. A 7% increase in units sold

6. A 7% decrease in units sold
7. An 11% increase in fixed costs and a 11% increase in units sold
8. A 4% increase in fixed costs and a 4% decrease in variable costs

Which of these alternatives yields the highest budgeted operating income? Explain why this is the case. **(CILO 2) (10)**

2. X Ltd. is engaged in the manufacture of Television sets. It produces 24000 such gadgets p.a. The company also manufactures 24000 units of a component. The departmental expense budget p.a is as under:

(Rs.)

Direct Material	3840000
Direct Labour	1536000
Indirect labour	720000
Inspection and testing	480000
Lighting	40000
Power	480000
Insurance	30000
Depreciation (fixed)	96000
Misc. fixed expense	54000

If the company stops manufacturing the component and buys the same from the market, the savings in departmental budget will be as under:

Direct Material	20%
Direct Labour	25%
Indirect labour	20%
Inspection and testing	25%
Power	25%

The purchase price of the component is Rs. 70 each.

Required:

i) State whether the company should make or buy the components.

ii) The company has received an offer for export of 12000 units at a price of Rs. 245 each. If the offer is accepted by the company, the capacity will be fully utilized and the components have to be purchased. Should the company then make or buy the component. **(CILO 1)**

OR

2. Best Trim, a manufacturer of lawn mowers, predicts that it will purchase 204,000 spark plugs next year. Best Trim estimates that 17,000 spark plugs will be required each month. A supplier quotes a price of $9 per spark plug. The supplier also offers a special discount option: If all 204,000 spark plugs are purchased at the start of the year, a discount of 2% off the $9 price will be given. Best Trim can invest its cash at 10% per year. It costs Best Trim $260 to place each purchase order.

Required:

i) What is the opportunity cost of interest forgone from purchasing all 204,000 units at the start of the year instead of in 12 monthly purchases of 17,000 units per order?

ii) Would this opportunity cost be recorded in the accounting system? Why?

iii) Should Best Trim purchase 204,000 units at the start of the year or 17,000 units each month? Show your calculations.

iv) What other factors should Best Trim consider when making its decision?

3. Sahara Ltd. produces and sales four products W, X, Y and Z. These products are similar and usually produced in production runs of 10 units and sold in a batch of 5 units. The production details of these products are as follows:

Products	W	X	Y	Z
Production (units)	100	110	120	150
Direct Material/unit (Rs.)	30	40	35	45
Direct Labour/unit (Rs.)	25	30	30	40
Machine hour rate/unit	5	4	3	4

The production overheads during the period are as follows:

Factory Works Expense	22500
Stores receiving cost	8100
Machine set-up cost	12200
Cost relating to quality control	4600
Material handling and dispatch	9600
Total	57000

The cost drivers for these overheads are as given below:

Cost	Cost drivers
Factory Works Expense	Machine Hours
Stores receiving cost	Requisitions raised

Machine set-up cost	No. of production runs
Cost relating to quality control	No. of production runs
Material handling and dispatch	No. of orders executed

The no. of requisitions raised on the stores was 25 for each product and the no. of orders executed was 96, each order was in a batch of 0.5 units.

Calculate:

i) Total cost of each product assuming the absorption of overhead by using Activity Based Costing. **(CILO 1)**
(10 MARKS)

OR

3. a) State any five distinctions between Cost Accounting, Management Accounting, and Financial Accounting. (5)

b) Annual fixed Cost of a company is Rs.1,00,000.P/v ratio is 50%.What will be the annual turnover of the company to achieve profit Rs.50,000. (**CILO 1) (5)**

Sec B

(Case Study; 20 marks; CILO 3)

4. The details regarding a consumer goods manufactured by XYZ Co. for the last one week is as follows:

Standard cost (For one unit)		(Rs)
Direct materials	(10 units @ Rs 1.50)	15
Direct wages	(5 hours @ Rs 8)	40
Production overheads	(5 hours @ Rs 10)	50
		10
		5

Actual (For whole activity)

Direct materials	Rs6,435	Direct wages	Rs16,324

Analysis of variances

Direct materials				
	Price	Rs585 (A)	Usage	Rs375 (F)
Direct wages (labour)				
	Rate	Rs636 (F)	Efficiency	Rs360 (A)
Production overheads				
	Expenditure	Rs400 (F)	Volume	Rs750 (F)

You are required to calculate :

i. Actual output unit

ii. Actual price of material per unit

iii. Actual wage rate per labour hour

iv. The amount of production overhead incurred

v. The production overhead efficiency variance. (4 marks x 5) **(CILO 3)**