CMA Intermediate

MANAGEMENT ACCOUNTING

Dec 2025 – Exam Booster

Quest on 1 (Act vity Based Cost ng)

Your Cost Controller is not happy about the existing system of charging overheads to its Products, A and B. You have been newly appointed as a Management Accountant of the company and you are asked to implement the ABC Costing for allocation of overheads to the Products. You have identified the following activities, budgeted costs, and activity consumption cost drivers as follows:

Activity	Budgeted Cost ₹	Activity Consumption Cost Driver
Engineering	1,25,000	Engineering hours
Setups	3,00,000	Number of setups
Machine operation	15,00,000	Machine hours
Packing	75,000	Number of packing orders
Total	20,00,000	

You have also gathered the following operating data pertaining to each of its products:

	Product A	Product B	Total
Engineering hour	5,000	7,500	12,500
Number of setups	200	100	300
Machine hours	50,000	1,00,000	1,50,000
Number of packing orders	5,000	10,000	15,000

You are now required to provide with necessary calculations and relevant information, in the form of a report to the Cost Controller about the allocation of overheads costs to the products.

Quest on 2 (Act vity Based Cost ng)

A manufacturing company has three accounts clerks responsible for processing purchase invoices of suppliers. Each clerk is paid a salary of ₹ 1,50,000 per annum and is capable of processing 5,000 purchase invoices per year. In addition to the salary, the company spends ₹ 45,000 per year for printing of forms, postage etc. (assuming that 15,000 purchase invoices are processed).

During the year, 12,500 purchase invoices were processed. You are required to:

1. Calculate the activity rate for the purchase order activity. Break the activity rate into fixed and variable components.
2. Calculate the total activity availability and break this into activity usage and unused activity.
3. Calculate the total cost of resources supplied and break this into activity usage and unused activity.

Quest on 3 (Marginal)

An exporter of auto machine parts is earning a profit of ₹ 1,00,000 on a sale of ₹ 12,00,000. Selling price is ₹ 40 per part and variable cost is ₹ 30 per part. The exporter incurs an additional fixed cost of ₹ 3,00,000 on product improvement which also enables him to economise ₹ 5 in per part variable cost. As per trade agreements, the sale of his parts is restricted to the old value of ₹ 12,00,000.

Determine the selling price per part so that the exporter earns the same profit at the same sales value?

Quest on 4 (Marginal)

M/s BLB Industries provided you the following information for the year ended31-03-2023:

Particulars	Amount (In ₹)
Sales	40,000
Raw Material Cost	20,000
Direct Wages	6,000
Fixed & Variable Overhead	10,000
Profit	4,000
Units Sold	200 units

In the next financial year M/s BLB Industries expects the following:

(i) Wage rate will increase by 50%.
(ii) Fixed Cost will decrease by ₹ 1,000.
(iii) No. of units to be sold in the next year is 300 units.
(iv) Total Fixed & Variable overhead in the next financial year will be ₹ 12,000.

How many units are required to be sold in the next year so that same amount of profit per unit as in 2023 can be achieved?

Quest on 5 (Marginal)

A review, made by the top management of Sweet and Struggle Ltd. which makes only one product, of the result of two first quarters of the year revealed the following:

Sales in units	10,000
Loss	₹ 10,000
Fixed Cost (for the year ₹ 1,20,000)	30,000 Quarter
Variable cost per unit	₹ 8

The Finance Manager who feels perturbed suggests that the company should at least break-even in the second quarter with a drive for increased sales. Towards this the company should introduce a better packing which will increase the cost by ₹ 0.50 per unit.

The Sales Manager has an alternate proposal. For the second quarter additional sales promotion expenses can be increased to the extent of ₹ 5,000 and a profit; of ₹ 5,000 can be aimed at for the period with increased sales.

The Production Manager feels otherwise. To improve the demand the selling price per unit has to be reduced by 3%. As a result, the sales volume can be increased to attain a profit level of ₹ 4,000 for the quarter.

The Managing Director asks for as a cost Accountant to evaluate these three proposals and calculate the additional units required to reach their respective targets help him to make a decision.

Quest on 6 (Transfer Pricing)

Division A is a profit centre, which produces four products P, Q, R and S. Each product is sold in the external market also. Data for the period is as follows:

	P	Q	R	S
Market Price per unit (₹)	350	345	280	230
Variable Cost of Production per unit (₹)	330	310	180	185
Labour hours required per unit	3	4	2	3

Product S can be transferred to Division B but the maximum quantity that might be required for transfer is 2,000 units of S.

The maximum sales in the external market are:
P - 3,000 units
Q - 3,500 units
R - 2,800 units
S - 1,800 units

Division B can purchase the same product at a slightly cheaper price of ₹ 225 per unit instead of receiving transfers of products S from Division A.

Calculate the transfer price for each unit for 2,000 units of S, if the total labour hours available in Division A are:

(i) 24,000 hours?
(ii) 32,000 hours?

Quest on 7 (Transfer Pricing)

Aurthor company is a multidivisional company and its managers have been delegated full profit responsibility and autonomy to accept or reject transfers from other divisions.

Division X produces a sub-assembly with a ready competitive market. This sub-assembly is currently used by Division Y for a final product that is sold outside at ₹ 1,200. Division X Charges Division Y market price for the sub-assembly which is ₹ 700 per unit. Variable costs are ₹ 520 and ₹ 600 for Divisions X and Y respectively.

The manager of Division Y feels that Division X should transfer the subassembly, at a lower price than market because at this price, Division Y is unable to make a profit.

Required:

(i) Calculate Division Y's profit contribution if transfers are made at the market price and also the total contribution to profit for the company.

(ii) Assume that Division A can sell all its production in the open market. Should Division X transfer goods to Division Y? If so, at what price.

(iii) Assume that Division X can sell in the open market only 500 units at ₹ 700 per unit out of 1,000 units that it can produce every month and that a 20 per cent reduction in price is necessary to sell at full capacity. Should transfers be made? If so, how many units should it transfer and at what price? prepare a schedule showing comparisons of contribution margins under three different alternatives to support your decision.

Quest on 8 (Standard Cost ng) – Link not available [Source: PTP D23]

M/s Gems Limited provided you the following data for the month of March, 2023.

Particulars	Standard	Actual
Fixed Overhead	₹ 30,000	₹ 35,000
Units Produced	1,000	1,200
Hours Per Unit	1	1.1
No. of days	20	23

You are required to calculate the following Fixed Overhead Variances:

(i) Efficiency Variance
(ii) Capacity Variance
(iii) Idle Time Variance
(iv) Volume Variance
(v) Budget/Expenditure Variance
(vi) Fixed Overhead Cost Variance

Quest on 9 (Standard Cost ng) – Link not available [Source: PTP J24]

JK Ltd. has furnished the following information:

Standard overhead absorption rate per unit	₹ 20
Standard rate per hour	₹ 4
Budgeted production	12000 units
Actual production	15560 units
Actual hours	74000

Actual overheads were ₹ 2,95,000 out of which ₹ 62,500 is fixed.

Overheads are based on the following flexible budget:

Production (units)	8000	10000	14000
Total Overheads (₹)	1,80,000	2,10,000	2,70,000

Required (with detailed working note and on hourly basis):

(i) Calculate Standard Variable O/H and Fixed O/H rates per hour.

(ii) Calculate Variable Overhead Efficiency and Expenditure Variance.

(iii) Calculate Fixed Overhead Efficiency and Capacity Variance.

Quest on 10 (Standard Cost ng) – Link not available [Source: MQP D24]

The standard material cost for 100 kg of chemical D is made up:
Chemical A 30 kg. @ ₹ 4 per kg
Chemical B 40 kg. @ ₹ 5 per kg
Chemical C 80 kg. @ ₹ 6 per kg

In a batch 500 kg. of chemical D were produced from a mix of
Chemical A 140 kg. @ ₹ 588
Chemical B 220 kg. @ ₹ 1,056
Chemical C 440 kg. @ ₹ 2,860

Calculate the different variance in the actual cost per 100 kg. of chemical D over the standard cost.

Quest on 11 (Budget)

ASHUB (P) Company manufactures two products — X and Y. A forecast of units to be sold in the first five month of the year is given below:

Months	Product X	Product Y
April	1,000	2,800
May	1,200	2,800
June	1,600	2,400
July	2,000	2,000
August	2,400	1,600

Other information is as follows:

Cost per unit	Product X	Product Y
Direct Materials	12.50	19.00
Direct Labour	4.50	7.00
Factory Overhead	3.00	4.00

There will be no opening and closing work-in-progress at the end of any month. Finished product (in units), equal to half of the budgeted sales of the next month, should be in stock at the end of each month (including previous year ended March).

You are required to prepare:

(i) Production (in quantity) Budget for April to July;

(ii) Summarized Production Cost Budget for the period.

Quest on 12 (Budget)

Draw up a flexible budget for overhead expenses on the basis of the following data and determine the overhead rates at 70%, 80% and 90%

Plant Capacity	At 80% capacity (₹)
VARIABLE OVERHEADS:	
Indirect labour	12,000
Stores including spares	4,000
SEMI VARIABLE:	
Power (30% - Fixed: 70% -Variable)	20,000
Repairs (60% - Fixed: 40% -Variable)	2,000
FIXED OVERHEADS:	
Depreciation	11,000
Insurance	3,000
Salaries	10,000
Total overheads	62,000
Estimated Direct Labour Hours	1,24,000

Quest on 13 (DPM)

The Cost Sheet of M/s Aptamil Limited for the year ended 31-03-2024 is as under:

Particulars	Cost Per Unit (in ₹)
Direct Material	5
Direct Labour	3
Direct Expenses	2
Prime Cost	10
Factory Overheads	4
Works Cost	14
Office & Administrative Overheads	4
Cost of Goods Sold	18
Selling & Distribution Overheads	2
Cost of Sales	20

The company sold 5 lacs units of its product during 2023-24 at a margin of 15% on cost.

There is no opening & closing stock of finished goods. On 01-07-2023 the company sold an asset for ₹ 2,50,000 to M/s Isomil Limited. The cost and accumulated depreciation of the asset as on 31-03-2023 is ₹ 3,50,000 and ₹ 1,50,000 respectively. The Company charges depreciation @ 10% under Written Down Value (WDV) method. There is no tax on profit on sale of asset. The market capitalization of the company comprises of the following:

Particulars	Amount (in ₹)
12% Bond	10,00,000
Equity Share Capital	7,00,000
Reserve & Surplus	1,00,000
	18,00,000

Additional information:

(i) Risk free rate of return is 10%.
(ii) NIFTY return is 15%.
(iii) Effective rate of tax applicable to the company is 30%.
(iv) Beta factor (β) of the company is 0.90. Assume Principle of Capital Asset Pricing Model (CAPM) holds good.

You are required to: Calculate Economic Value Added (EVA) of M/s Aptamil Limited as on 31-03-2024 and comment on your answer.

Quest on 14 (DPM)

The following information is supplied by ABC Ltd. for the year 31-03-2024:

Sl. No.	Particulars	(₹ In Crores)	(₹ In Crores)
(i)	Profit after tax (PAT)		275.90
(ii)	Interest		4.95
(iii)	Equity Share Capital	40.00	
	Accumulated Surplus	750.00	
	Shareholders fund	790.00	
	Loans (Long term)	40.00	
	Total long term funds		830.00
(iv)	Market Capitalization		2900.00
	Additional information		
(a)	Risk free rate		12.00
(b)	Long Term Market Rate (Based on BSE Sensex)		15.50 %
(c)	Effective tax rate for the company		30 %
(d)	Beta (β) for last few years		
	Year		
	1	0.48	
	2	0.52	
	3	0.60	
	4	1.10	
	5	0.99	

You are required to calculate the Economic Value Added of ABC Ltd. as on 31st March, 2024.

Quest on 15 (Learning Curve)

ZEMAN Ltd., a manufacturing company has 10 direct workers, who work for 25 days a month of 8 hour per day. The estimated down time is 25% of total available time. The company makes gift items. The company has received an order of 30 units from a customer. The first unit of gift item required 40 direct labour hours to manufacture.
The company expects 90% (Index is = — 0.152) learning curve for this type of work.

The company uses standard absorption costing and cost data is as under:

Direct Material	₹ 60 per unit
Direct Labour	₹ 6 per direct labour hour
Variable Overheads	₹ 2 per direct labour hour
Fixed Overheads	₹ 7,500 per month

Required:

(i) Calculate the total cost per unit of gift item for the first order of 30 units.

(ii) If the company receives a repeat order from the said customer for 40 units of gift items, ascertain the price per unit to be quoted to yield a profit of 20% on selling price. (All figures to be rounded off to whole number).

[Given: $(30)^{-0.152} = 0.596$; $(50)^{-0.152} = 0.552$; $(60)^{-0.152} = 0.537$ and $(70)^{-0.152} = 0.524$]

Quest on 16 (Learning Curve)

MAGNA CARTA LTD a manufacturers of fountain pens received an order for 16 units of a new fountain pen called the DENIMA. The first unit required 40 direct labour hours. So far, 4 units have been completed and a total of 102.40 direct labour hours has been recorded for the 4 units. The Production Manager expects on 80% learning effect for this type of work.

The direct cost attributed to the centre in which the unit is manufactured and its costs are as follows:

	₹
Direct Material	30.00 per unit
Direct Labour	6.00 per hour
Variable overhead	0.50 per direct labour hour
Fixed overheads apportioned	5.00 per direct labour hour

You are required to calculate the estimated product cost for the initial order based on the cost data given.

Quest on 17 (Decision Theory)

B Ltd. has a new wonder product, the V, of which it expects great things. At the moment the company has two courses of action open to it, to test market the product or abandon it.

If the company test markets it, the cost will be ₹ 1,00,000 and the market response could be positive or negative with probabilities of 0.60 and 0.40.
If the response is positive the company could either abandon the product or market it full scale.

If it markets the V in full scale, the outcome might be low, medium or high demand, and the respective net gains/ (losses) would be (200), 200 or 1,000 in units of ₹ 1,000 (the result could range from a net loss of ₹ 2,00,000 to a gain of ₹ 10,00,000). These outcomes have probabilities of 0.20, 0.50 and 0.30 respectively.
If the result of the test marketing is negative and the company goes ahead and markets the product, estimated losses would be ₹ 6,00,000.

If, at any point, the company abandons the product, there would be a net gain of ₹ 50,000 from the sale of scrap. All the financial values have been discounted to the present.

Required:

Prepare and draw a decision tree and also include figures for cost, loss or profit on the appropriate branches of the tree.

Quest on 18 (Decision Theory)

SIDSORY Ltd., a food products company, is contemplating the introduction of a revolutionary new product with new packaging to replace the existing product at a the much higher price (S_1), or, a moderate change in the composition of the existing product with a new packaging at a small increase in price (S_2), or, a small change in price (S_3). The possible states of nature or events are (i) high increase in the sales (N_1), (ii) no change in the sales (N_2) and (iii) decrease in the sales (N_3). The marketing department of the company worked out the pay-offs in terms of yearly net profits for each of the strategies for these events (expected sales). This is represented in the following table.

Pay-offs (in ₹)

	State of Nature		
Strategies	N_1	N_2	N_3
S_1	7,00,000	3,00,000	1,50,000
S_2	5,00,000	4,50,000	0
S_3	3,00,000	3,00,000	2,00,000

Required:

Develop a course of action for SIDSORY Ltd., based on—

(i) Maximin Criterion
(ii) Maximax Criterion
(iii) Laplace Criterion
(iv) Hurwicz Criterion [Alpha (α) = 0.4]