

Paper 8- Cost Accounting

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Full Marks: 100

Time allowed: 3 hours

Section-A

Section A contains Question Number 1. All parts of this question are compulsory.

1. Answer the following questions

(a) Choose the most appropriate alternative for the following (you may write only the Roman numeral and the alphabet chosen for your answer): [1x10=10]

- (i) Joint Cost is suitable for _____
- (a) Infrastructure Industry
 - (b) Ornament Industry
 - (c) Oil Industry
 - (d) Fertilizer Industry
- (ii) Which of the following is considered as normal loss of material?
- (a) Pilferage
 - (b) Loss due to accident
 - (c) Loss due to careless handling of material
 - (d) None of these
- (iii) Under the high wage plan, a worker is paid
- (a) At a time rate higher than the usual rate
 - (b) According to his efficiency
 - (c) At a double rate for overtime
 - (d) Normal wages plus bonus
- (iv) A manufacturing industry produces product P, Royalty paid on sales is ₹ 23,500 and design charges paid for the product is ₹ 1,500. Compute the Direct Expenses.
- (a) ₹ 25,000
 - (b) ₹ 22,000
 - (c) ₹ 26,500
 - (d) None of these
- (v) When overtime is required for meeting urgent orders, overtime premium should be
- (a) Charged to profit and loss A/c
 - (b) Charged to overhead costs
 - (c) Charged to respective jobs
 - (d) Ignored
- (vi) What will be the accounting entry for absorption entry for absorption of factory overhead?
- (a) Dr. Works in progress control A/c

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- Cr. Factory overhead control A/c
- (b) Dr. Factory overhead
 Cr. Factory overhead control A/c
- (c) Dr. Overhead adjustment A/c
 Cr. Factory overhead control A/c
- (d) None of the above
- (vii) In Reconciliations Statements, transfers to reserves are _____.
- (a) Added to financial profit
 (b) Deducted from financial profit
 (c) Ignored
 (d) Deducted from costing profit
- (viii) Standard deals with the determination of averages/equalized transportation cost
- (a) CAS 6
 (b) CAS 22
 (c) CAS 9
 (d) CAS 5
- (ix) If sales are ₹ 150,000 and variable cost are ₹ 50,000. Compute P/V ratio.
- (a) 66.66%
 (b) 100%
 (c) 133.33%
 (d) 65.66%
- (x) The basic difference between a fixed budget and flexible budget is that a fixed budget _____
- (a) Is concerned with a single level of activity, while flexible budget is that a prepared for different levels of activity
 (b) Is concerned with fixed costs, while flexible budget is concerned with variable costs
 (c) Is fixed while flexible budget changes
 (d) None of these

Answer:

(i)C	(ii)C	(iii)A	(iv)A	(v)B
(i)A	(ii)A	(iii)D	(iv)A	(v)A

- (b) Match the statement in column I with the most appropriate statement in column II
[5×1=5]

	Column I		Column II
(i)	Notional Rent charged to	A.	CAS 22
(ii)	Manufacturing cost	B.	Income credited only in cost accounts
(iii)	Process of classifying material	C.	CAS 15
(iv)	Selling and Distribution Overheads	D.	Sunk cost
(v)	Historical cost	E.	FSN Analysis

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Answer:

(i)B	(ii)A	(iii)E	(iv)C	(v)D
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- (c) State whether the following statements are 'True' or 'False' [5×1=5]
- (i) Standard costing and budgetary control techniques are complementary to each other.
 - (ii) The objective of CAS 10 is to bring uniformity and consistency in the period and methods of determining the direct expenses with reasonable accuracy.
 - (iii) Factory overhead cost applied to a job is usually based on a pre-determined rate.
 - (iv) Stock ledger contains the accounts of all items of finished goods.
 - (v) No distinction is made between co products and joint products.

Answer:

(i)True	(ii)True	(iii)True	(iv)True	(v)False
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- (d) Fill in the blanks: [5×1=5]
- (i) Material transfer note is a _____ for transferring the materials from one job to other job.
 - (ii) Charging of fair share of overhead expenses to cost centre or a department is called _____ .
 - (iii) Purchases for special job is debited to _____ Accounts.
 - (iv) _____ is applicable to engineering concerns, construction companies, ship-building, furniture making, hardware and machine manufacturing industries, repair shops, automobile garages and several such other industries.
 - (v) There are two ways to treat the costs of the beginning inventory: _____ and _____.

Answer:

(i) Document	(ii) Apportionment	(iii) Work-in- Progress Control A/C	(iv) Job Order Costing	(v) weighted average costing, first-in, first-out (FIFO)
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Section – B

Answer any five questions from question numbers 2 to 8.

Each question carries 15 marks

2. (a) From the following particulars with respect to a particular item of materials of a manufacturing company, calculate the best quantity to order:

Ordering quantities (tonne)	Price per ton Amount (₹)
Less than 250	5.00
250 but less than 800	4.90
800 but less than 2,000	4.80
2,000 but less than 4,000	4.70

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4,000 and above

4.60

The annual demand for the material is 4,000 tonnes. Stock holding costs are 20% of material cost p.a. The delivery cost per order is ₹ 5.00 [8]

2. (b) From the following data of Solar System Ltd., work out the predetermined MHR for departments Mars and Jupiter of a factory:

	Total ₹	Dept. Mars ₹	Dept. Jupiter ₹
Spare parts	9,000	4,000	5,000
Power costs	16,000	-	-
Consumable stores	6,000	3,000	3,000
Insurance on machinery	6,000	-	-
Depreciation on machinery	30,000	10,000	20,000
Indirect labour	42,000	-	-
Building Maintenance	7,000	-	-

The final estimates are to be prepared on the basis of above figures after taking into consideration the following factors:

- (a) An increase of 10% in the price of spare parts.
- (b) An increase of 20% in the consumption of spare parts for department Jupiter only.
- (c) Increase in the straight line method of depreciation from 10% on the original value of machinery to 12%
- (d) 15% general increase in wage rates.

The following information is available:

	Dept. Mars	Dept. Jupiter
Estimated DLH	80,000	1,20,000
Ratio of K.W. Rating	3	2
Estimated MH	25,000	30,000
Floor space (sq.ft)	15,000	20,000

[7]

Answer 2(a):

Statement showing computation of total inventory cost at different order sizes (Annual Demand = 4,000 tonnes)

		Ordering Quantities				
	Particulars	200	250	800	2000	4000
I	Purchasing cost	$(4,000 \times 5) = 20,000$	$(4,000 \times 4.9) = 19,600$	$(4,000 \times 4.8) = 19,200$	$(4,000 \times 4.7) = 18,800$	$(4,000 \times 4.6) = 18,400$
II	No. of orders	$(4000/200) = 20$	$(4000/250) = 16$	$(4000/800) = 5$	$(4000/2000) = 2$	$(4000/4000) = 1$
III	Ordering Cost @ ₹ 5	100	80	25	10	5
IV	Average size of order	$(200/2) = 100$	$(250/2) = 125$	$(800/2) = 400$	$(2000/2) = 1000$	$(4000/2) = 2000$
V	Inventory carrying cost	$(5 \times 20\%) = 1.00$	$(4.90 \times 20\%) = 0.98$	$(4.80 \times 20\%) = 0.96$	$(4.70 \times 20\%) = 0.94$	$(4.60 \times 20\%) = 0.92$

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	per unit					
VI	Inventory carrying cost [IV × V]	100	122.5	384	940	1,840
VII	Total Inventory cost [III+I+VI]	20,200	19,802.5	19,609	19,750	20,245

For the above consumption the best quantity to order is 800 units.

Answer 2(b):

Computation of Machine Hour Rate (MHR) for the Departments Mars and Jupiter:

Particulars	Basis of Apportionment	Total	Dept. Mars	Dept. Jupiter
Spare parts	W N 1	11,000	4,400	6,600
Power costs	KW Rating (3:2)	16,000	9,600	6,400
Consumables stores	Actual	6,000	3,000	3,000
Depreciation on machinery	W N 2	36,000	12,000	24,000
Insurance on machinery	Value of machinery (1:2)	6,000	2,000	4,000
Indirect labour	DLH (2:3)	48,300*	19,320	28,980
Building Maintenance	Floor space (3:4)	7,000	3,000	4,000
Total Factory Overhead [P]		1,30,300	53,320	76,980
Estimated Machine Hours [Q]			25,000	30,000
Machine Hour Rate (MHR) [P ÷ Q]			2.1328	2.566

Working Notes:

Particulars	Dept. Mars	Dept. Jupiter
1. Spare parts	4,000	5,000
Add: Increase in price @10%	400	500
	4,400	5,500
Add: Consumption Increase @ 20% for dept. Jupiter	-	1,100
Total	4,400	6,600
2. Depreciation	10,000	20,000
Value of machinery	10,000 ÷ 10%	20,000 ÷ 10%
	= 1,00,000	= 2,00,000
Revised depreciation @ 12%	12,000	24,000

*There is a 15% general increase in wage rates. Hence the indirect labour is 48,300 [42,000 + 15% of 42000]

3. (a) List the scope of CAS -5

[6]

3. (b)The Net profit of Dhronacharya Ltd., appeared at 41,800 as per financial records for the year ending 31st March, 2019. A scrutiny of the figures from both the sets of accounts revealed the following facts:

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		(₹)
Stores adjustment (credit) in financial books		230
Value of opening stock in : Cost accounts	24,800	
: Financial accounts		26,300
Value of closing stock in : Cost accounts	25,000	
: Financial accounts		23,000
Interest charged in cost accounts		2,000
Imputed rent charged in cost accounts		1,000
Goodwill written off		4,850
Loss on sale of furniture		750
Selling and distribution expenses not charged in cost accounts		10,000
Donations to Prime Minister's Relief Fund		5,700
Transfer to Debenture Redemption Fund		8,900
Transfer to Dividend Equalization Fund		20,000
Works overhead under – recovered in costs		1,500
Administrative Overheads over-recovered in costs		800
Depreciation charged in financial accounts		5,600
Depreciation recovered in costs		6,300
Interest on investments not included in costs	3,000	
Loss due to obsolescence charged in financial accounts		3,000
Income tax reserve made in financial accounts	20,000	
Bank interest and transfer fee credited in financial books		370

You are required to prepare a statement showing the reconciliation statement and find out the profit as per cost accounts.

[9]

Answer 3(a):

CAS-5: COST ACCOUNTING STANDARD ON DETERMINATION OF AVERAGE COST OF TRANSPORTATION:

The Cost Accounting Principles for tracing/identifying an element of cost, its allocation/apportionment to a product or service are well established. Transportation Cost is an important element of cost for procurement of materials for production and for distribution of product for sale. Therefore, Cost Accounting Records should present transportation cost separately from the other cost of inward materials or cost of sales of finished goods. The Finance Act 2003 also specifies the certification requirement of Transportation Cost for claiming deduction while arriving at the assessable value of excisable goods cleared for home consumption/ export. There is a need to standardize the record keeping of expenses relating to transportation and computation of Transportation Cost.

Scope

This standard should be applied for calculation of cost of transportation required under any statute or regulations or for any other purpose. For example, this standard can be

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used for:

- (a) Determination of average transportation cost for claiming the deduction for arriving at the assessable value of excisable goods
- (b) Insurance claim valuation
- (c) Working out claim for freight subsidy under Fertilizer Industry Coordination Committee
- (d) Administered price mechanism of freight cost element
- (e) Determination of inward freight costs included or to be included in the cost of purchases attributable to the acquisition
- (f) Computation of freight included in the value of inventory for accounting on inventory or valuation of stock hypothecated with Banks / Financial Institution ...etc

Answer 3(b):

Statement of Reconciliation

Particulars	Amount (₹)	Amount (₹)
Profit as per financial Accounts		41,800
Add :		
Works Overhead under recovered in Cost Accounts	1,500	
Expenses and losses debited in Financial Accounts but excluded from Cost Accounts:		
Under valuation of opening stock in Cost Accounts	1,500	
Over valuation of closing stock in Cost Accounts	2,000	
Goodwill written off	4,850	
Loss on sale of furniture	750	
Selling & Distribution expenses not charged in Cost Accounts	10,000	
Donation to Prime Minister's Relief Fund	5,700	
Transfer to Debenture Redemption Reserve	8,900	
Transfer to Dividend Equalization Fund	20,000	
Income tax reserve	20,000	
Loss due to obsolescence	3,000	78,200
		1,20,000
Less :		
Administrative overheads over-recovered in Cost Accounts	800	
Depreciation over-charged in Cost Accounts	700	
Incomes and gains credited in Financial books but not shown in Cost Accounts:		
Stores adjustments	230	
Interest charged in Cost Accounts	2,000	
Imputed rent charged in Cost Accounts	1,000	
Interest on investments	3,000	
Bank interest and transfer fees	370	8,100
Profit as per Cost Accounts		1,11,900

4. (a) A shop floor supervisor of a factory presented the following cost for Job No.425 to determine selling price

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	(₹)
Material	5,000
Direct wages (180 hours @ ₹20 per hour)	
Dept. X – 70 hrs Dept. Y – 60 hrs Dept. Z – 50 hrs	3,600
Chargeable expenses (special stores items)	1,000
	9,600
Add: 33 1/3% for expenses	3,200
Total cost	12,800

Profit and Loss Account for the previous year

Particulars	(₹)	(₹)	Particulars	(₹)	(₹)
Materials used		12,00,000	Sales (Less returns)		20,00,000
Direct wages:					
Dept. X	70,000				
Dept. Y	90,000				
Dept. Z	80,000	2,40,000			
Special stores items		32,000			
Overheads:					
Dept. X	42,000				
Dept. Y	54,000				
Dept. Z	32,000	1,28,000			
Gross Profit c/d		4,00,000			
		20,00,000			20,00,000
Selling Expenses		1,60,000	Gross profit b/d		4,00,000
Net Profit		2,40,000			
		4,00,000			4,00,000

It is also noted that average hourly rates for the three departments X, Y and Z are similar. You are required to calculate and enter revised cost of Job No.425 using the actual figures for the previous year as the basis. Add 25% to the total cost to determine the selling price. Give necessary notes. [8]

4. (b) CRI Ltd., manufactures certain grades of products known as Main product M, By product A and By product B. In the course of manufacturing product M (main product), by-products A and B emerge. The joint expenses of manufacture amount to ₹ 2,37,600. All the three products are processed further after separation and sold as per details given below:

Product – M

(By-products)

		Product A	Product B
Sales (₹)	3,00,000	1,20,000	80,000
Cost incurred after separation (₹)	30,000	25,000	10,000
Profit as percentage on sales	25	20	15

Total fixed selling expenses are 10% of total cost of sales which are apportioned to three products in the ratio of 20:40:40.

Required:

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- (i) Prepare a statement showing the apportionment of joint costs to the products (M, A and B)
- (ii) If the product A (by product) is not subject to further processing and is sold at the point of separation, for which there is a market at ₹ 95,440 without incurring any selling expenses, would you advise its disposal at this stage? Show the workings. [7]

Answer 4(a):

Job Cost Sheet of Job No. 425

Particulars	Amount (₹)	Amount (₹)
Materials		5,000
Direct wages :		
Dept X: 70 hrs @ ₹ 20	1,400	
Dept Y: 60 hrs @ ₹ 20	1,200	
Dept Z: 50 hrs @ ₹ 20	1,000	3,600
Chargeable Expenses		1,000
Overheads:		
Dept X: 70 hrs @ ₹ 12	840	
Dept Y: 60 hrs @ ₹ 12	720	
Dept Z: 50 hrs @ ₹ 8	400	1,960
Works cost		11,560
Selling overheads (10% × ₹ 11,560)		1,156
Total cost		12,716
Profit (25% on 12,716)		3,179
Selling price		15,895

Working Notes:

- Hours of Department = Departmental wages ÷ Hourly wage rate:
 Dept. X ₹ 70,000/20 = 3500 hrs
 Dept. Y ₹ 90,000/20 = 4500 hrs
 Dept. Z ₹ 80,000/20 = 4000 hrs
- Departmental overheads on the basis of previous year's figures = Overheads ÷ Labour hours:
 Dept. X ₹ 42,000/3,500 = ₹ 12
 Dept. Y ₹ 54,000/4,500 = ₹ 12
 Dept. Z ₹ 32,000/4,000 = ₹ 8
- Selling overheads as a percentage of works cost = overheads ÷ works cost
 1,60,000/₹ 16,00,000 = 10%

Answer 4(b):

- (i) Statement of Apportionment of joint cost

Particulars	Total	By-Products		
		Product M	A	B
	(₹)	(₹)	(₹)	(₹)
Sales	5,00,000	3,00,000	1,20,000	80,000
Less: Profit	1,11,000	75,000	24,000	12,000
Cost of Sales	3,89,000	2,25,000	96,000	68,000
Less: Selling & Distribution				

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Expenses (10% of ₹ 3,89,000 in the ratio 20:40:40)	38,900	7,780	15,560	15,560
Cost of production	3,50,100	2,17,220	80,440	52,440
Less: After separation Cost	65,000	30,000	25,000	10,000
Joint cost	2,85,100	1,87,220	55,440	42,440

- (ii) By product A earns ₹ 24,000 as profit after separation
 Profit before separation = ₹ 95,440 - ₹ 55,440 = ₹ 40,000
 If By-product A is sold before further processing, then the profit of the by-product may be increased by ₹ (40,000 - 24,000) = ₹ 16,000
 Hence it is advisable to sell the product A at the point of separation.

5. (a) Gupta Holiday Homes has hired a building at a rent of ₹ 20,000 per month along with 5% of total taking. It has three types of suites for its customers, viz., single room, double rooms and triple rooms. Following information is given:

Type of suite	Number	Occupancy percentage
Single room	100	100%
Double rooms	75	80%
Triple rooms	50	60%

The rent of double room suite is to be fixed at 3 times of the single room suite and that of triple room suite as twice of the double room suite. The other expenses for the year 2019 are as follows:

	(₹)
Staff salaries	20,22,100
Room attendant's wages	5,50,000
Lighting, heating and power	2,25,000
Repairs and renovation	1,30,000
Laundry charges	80,500
Interior decoration	70,000
Sundries	1,60,000

Provide profit @ 25% on total taking and assume 360 days in a year. You are required to calculate the rent to be charged for each type of suite. [8]

5. (b) Pioneer Constructions Ltd., obtained a contract for ₹ 50 lakhs. The following balances and information relate to the contract for the year ended 31st March, 2019:

	1.4.2018	31.03.2019
Work-in-progress		
Work certified	9,38,800	40,00,000
Work uncertified	11,200	33,000
Materials at site	10,000	21,000
Accrued wages	5,000	3,000

Additional information relating to the year 2018-2019 are:

	(₹)
Material issued from share	4,00,000
Material directly purchased	6,49,000
Wages paid	6,00,000
Architect's fees	51,000
Plant hire charges	52,000
Indirect expenses	72,000
Share of general overheads for contract	18,000
Materials returned to store	25,000

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Materials returned to supplier 16,000

Fines and penalties paid 12,000

The contractee pays 80% of work certified in cash. You are required to prepare:

(i) Contract Account showing the amount of profits transferred to profit and Loss A/c

(ii) Extract of Balance Sheet [7]

Answer 5(a):

(i) Total Equivalent single room suites

Nature of Suite	Occupancy	Equivalent single room suites
Single room suites	$100 \times 360 \times 100\% = 36,000$	$36,000 \times 1 = 36,000$
Double room suites	$75 \times 360 \times 80\% = 21,600$	$21,600 \times 3 = 64,800$
Triple room suites	$50 \times 360 \times 60\% = 10,800$	$10,800 \times 6 = 64,800$
	Total	1,65,600

(ii) Statement of Total Cost

Particulars	(₹)
Staff salaries	20,22,100
Room attendant's wages	5,50,000
Lighting, heating and power	2,25,000
Repairs and renovation	1,30,000
Laundry charges	80,500
Interior decoration	70,000
Sundries	1,60,000
	32,37,600
Building rent $20,000 \times 12 + 5\%$ on Total taking	2,40,000 + 5% on takings
Total cost	34,77,600 + 5% on total taking

Profit is 30% of total takings

∴ Total takings = ₹ 34,77,600 + 30% of total takings

Let x be rent for single room suite

Then $1,65,600 x = 34,77,600 + 30\%$ of (1,65,600 x)

Or $1,65,600 x = 34,77,600 + 49,680 x$

Or $1,15,920 x = 34,77,600$

X = 30

(iii) Rent to be charged for Single room suite = ₹ 30.00

Rent for Double rooms suites ₹ 30.00 × 3 = ₹ 90.00

Rent for Triple rooms suites ₹ 30 × 6 = ₹ 180.00

Answer 5(b):

Contract Account for the year ended 31st March, 2019

Dr.			Cr.		
Particulars		(₹)	Particulars		(₹)
To Work-in-progress b/d:			By Material		25,000
Work certified	9,38,800		returned to store		
Work Uncertified	11,200	9,50,000			
To Stock (materials) b/d		10,000	By Material		16,000
			returned		
			to		
			suppliers		
To Material issued		4,00,000	By Work-in-progress		
			c/d:		
To Material purchased		6,49,000	work certified	40,00,000	
To Architect's Fees		51,000	work uncertified	33,000	40,33,000

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To Plant hire charges		52,000	By Material stock c/d		21,000
To Indirect Expenses		72,000			
To wages incurred	6,00,000				
Add: closing Accrued wages	3,000				
Less: Opening Accrued wages	5,000	5,98,000			
To General overheads		18,000			
To Notional Profit C/d		12,95,000			
		40,95,000			40,95,000
To P & L A/c ($\frac{2}{3} \times 12,95,000 \times \frac{80}{100}$)		6,90,667	By Notional Profit B/d		12,95,000
To Reserve		6,04,333			
		12,95,000			12,95,000

Note: Fines and penalties are not shown in contract accounts

Extract of Balance sheet as on 31st March, 2019

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
P & L A/c	6,90,667		Materials stock at site		21,000
Less: fines	12,000	6,78,667	Material stock in store		25,000
Outstanding wages		3,000	Work-in-progress:		
			Value of work certified	40,00,000	
			Cost of work uncertified	33,000	
				40,33,000	
			Reserved profit	(6,04,333)	
				34,28,667	
			Cash received	(32,00,000)	2,28,667

6. (a) Kohinoor Ltd has furnished the following data for the month of March 2019:

Particulars	
Variable cost per unit	₹ 19
Fixed factory overhead	₹ 5,20,000
Fixed selling overhead	₹ 2,00,000
Sales price per unit	₹ 25

- a) What is the break-even point expressed in rupee sales?
- b) How many units must be sold to earn a target net income of ₹ 1,20,000 per month?
- c) How many units must be sold to earn a net income of 25% on cost?
- d) What should be the selling price per unit if break-even point is to be brought down to 1,60,000 units? [8]

6. (b) LMN company is at present working at 90% of its capacity and producing 13,500 units per annum. It operates a flexible budgetary control system. The following figures are obtained from its budget.

	90%	100%
	Amount (₹)	Amount (₹)
Sales	15,00,000	16,00,000

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Fixed expenses	3,00,500	3,00,600
Semi-fixed expenses	97,500	1,00,500
Variable expenses	1,45,000	1,49,500
Units made	13,500	15,000

Labour and material costs per unit are constant under present conditions. Profit margin is 10%.

- (a) You are required to determine the differential cost of producing 1,500 units by increasing capacity to 100%
- (b) What would you recommend for an export price for these 1,500 units taking into account that overseas prices are much lower than indigenous prices? [7]

Answer 6(a):

a) Calculation of BEP in rupees sales:

$$\begin{aligned} \text{Profit-volume ratio} &= \frac{\text{Contribution p.u}}{\text{Selling price p.u}} \times 100 \\ &= \frac{25 - 19}{25} \times 100 \\ &= 24\% \end{aligned}$$

$$\begin{aligned} \text{Break-even point} &= \frac{\text{Total fixed cost}}{\text{Contribution p.u}} \\ &= \frac{5,20,000 + 2,00,000}{24\%} \\ &= ₹ 30,00,000 \end{aligned}$$

b) Sales to earn a target net income of ₹ 1,20,000 per month:

$$\begin{aligned} &= \frac{\text{Total Fixed Cost} + \text{Desired Profit}}{\text{Contribution p.u}} \\ &= \frac{7,20,000 + 1,20,000}{6} \\ &= 1,40,000 \text{ units} \end{aligned}$$

c) No. of units to be sold to earn a net income of 25% on cost:

Profit @ 25% on cost means a profit @ 20% on sales.
Let sales be assumed as ₹ X,
∴ Desired profit will be 20% of x or 0.20x

$$\begin{aligned} X &= \frac{\text{Total Fixed Cost} + \text{Desired Profit}}{\text{P / V Ratio}} \\ X &= \frac{7,20,000 + 0.20x}{24\%} \end{aligned}$$

Answer to MTP_Intermediate_Syllabus 2016_Jun 2020_Set 2

$$\text{Or } X = \frac{7,20,000 + 0.20 \times \frac{100}{24}}{1}$$

$$24 X = 7,20,000 + 20 X$$

$$4X = 7,20,000$$

$$X = ₹ 180,00,000$$

$$\text{No. of units to be sold} = \frac{180,00,000}{25} = 7,20,000 \text{ units}$$

d) **Selling price per unit if BEP is brought down to 1,60,000 units**

$$\text{Contribution per unit} = \frac{\text{Fixed Cost}}{\text{BEP in units}}$$

$$= \frac{7,20,000}{1,60,000}$$

$$= ₹ 4.50 \text{ per unit}$$

$$\begin{aligned} \therefore \text{Selling price per unit} &= \text{Variable cost} + \text{Contribution} \\ &= ₹ 19.00 + ₹ 4.50 \\ &= ₹ 23.50 \end{aligned}$$

Answer 6(b):

Computation of material and labour cost

Particulars	Amount (₹)	Amount (₹)
Sales at present		15,00,000
Less: Profit @ 10%		1,50,000
Total cost		13,50,000
Less: All costs other than material & labour		
Fixed expenses	3,00,500	
Semi fixed expenses	97,500	
Variable expenses	1,45,000	5,43,000
Material & Labour cost		8,07,000

(a) Statement showing differential cost of 1500 units:

Particulars	Amount (₹)
Material & Labour (8,07,000 × 1500/13500)	89,667
Fixed Expenses (3,00,600 – 3,00,500)	100
Semi fixed expenses (1,00,500 – 97,500)	3,000
Variable expenses (1,49,500 – 1,45,000)	4,500
Differential cost	97,267

(b) Differential cost per unit = 97,267/1,500 = ₹ 64.84

The minimum price for these 1,500 units should not be less than ₹ 64.84

Answer to MTP_Intermediate_Syllabus 2016_Jun 2020_Set 2

7. (a) A chemical company gives you the following standard and actual data of its chemical No. 1234. You are required to calculate variances (material)

Standard Data

450	Kg of Material A @ ₹ 20 per kg	9,000
360	Kg of Material B @ ₹ 10 per kg	3,600
810		12,600
	2,400 Skilled hours @ ₹ 2	4,800
	1,200 unskilled hours @ ₹ 1	1,200
		6,000
90	Normal loss	
720		18,600

Actual Data

450	Kg of Material A @ ₹ 19 per kg	8,550
360	Kg of Material B @ ₹ 11 per kg	3,960
810		12,510
	2,400 Skilled hours @ ₹ 2.25	5,400
	1,200 unskilled hours @ ₹ 1.25	1,500
		6,900
50	Normal loss	
760		19,410

[8]

7. (b) A department of company ABC attains sale of ₹ 6,00,000 at 80% of its normal capacity and its expenses are given below:

	(₹)
Administration costs:	
Office salaries	85,000
General expenses	2 % of sales
Depreciation	6,500
Rates and taxes	9,000
Selling costs:	
Salaries	8 % of sales
Travelling expenses	2 % of sales
Sales office expenses	1% of Sales
General expenses	3% of Sales
Distribution costs:	
Salaries	15,000
Rent	1% of Sales
Other expenses	4% of Sales

Draw up a flexible budget at 90% and 100%

[7]

Answer 7(a):

Computation of Required Values

Material	Amount (₹)			
	SQSP(1)	RSQSP(2)	AQSP(3)	AQAP(4)
A	$475 \times 20 = 9,500$	9,000	$450 \times 20 = 9,000$	
B	$380 \times 10 = 3,800$	3,600	$360 \times 10 = 3,600$	
	13,300	12,600	12,600	12,510

Answer to MTP_Intermediate_Syllabus 2016_Jun 2020_Set 2

Computation of SQ

$$SQ = \left(\frac{\text{SQ for that material}}{\text{SQ for all the material}} \right) \times \text{AQ for that material}$$

$$\text{For A} = \left(\frac{450}{720} \right) \times 760 = 475 \text{ units}$$

$$\text{For B} = \left(\frac{360}{720} \right) \times 760 = 380 \text{ units}$$

Where (1) SQSP = Standard Cost of Standard Material = ₹ 13,300

(2) RSQSP = Revised Standard Cost of Material = ₹ 12,600

(3) AQSP = Standard Cost of Actual Material = ₹ 12,600

(4) AQAP = Actual Cost of Material = ₹ 12,510

Computation of Required Variances:

- a. Material yield variance = (1) – (2) = ₹ 700 (F) [₹(13,300 – 12,600)]
- b. Material Mix Variance = (2) – (3) = Nil [₹ (12,600 – 12,600)]
- c. Material usage Variance = (1) – (3) = ₹ 700 (F) [₹(13,300 – 12,600)]
- d. Material price Variance = (3) – (4) = ₹ 90 (F) [₹(12,600 – 12,510)]
- e. Material Cost Variance = (1) – (4) = ₹ 790 (F) [₹(13,300 – 12,510)]

Answer 7(b):

Flexible Budget of Departmentof Company ABC

Particulars	Basis	80%	90%	100%
Sales		5,00,000	5,62,500	6,25,000
Administrative costs:				
Office salaries	Fixed	85,000	85,000	85,000
General expenses	2 % of sales	10,000	11,250	12,500
Depreciation	Fixed	6,500	6,500	6,500
Rates & Taxes	Fixed	9,000	9,000	9,000
Total administration costs [A]		1,10,500	1,11,750	1,13,000
Selling costs:				
Salaries	8 % of sales	40,000	45,000	50,000
Travelling expenses	2% of sales	10,000	11,250	12,500
Sales office expenses	1% of sales	5,000	5,625	6,250
General expenses	3% of sales	15,000	16,875	18,750
Total selling costs [B]		70,000	78,750	87,500
Distribution costs:				
Wages	Fixed	15,000	15,000	15,000
Rent	1% of sales	5,000	5,625	6,250
Other expenses	4% of sales	20,000	22,500	25,000
Total Distribution costs [C]		40,000	43,125	46,250
Total Costs [A+B+C]		2,20,500	2,33,625	2,46,750

8. Short Note (any three)

[3×5=15]

- (a) Direct Material Cost
- (b) Objectives of Cost Accounting
- (c) Disclosure requirements as per CAS-10 (Limited Revision 2017) [any five]
- (d) Requisites of a good Cost Accounting System

Answer:

(a) Direct Material Cost:

Direct material cost can be defined as **'The Cost of material which can be attributed to a cost object in an economically feasible way'**. Direct materials are those materials which can be identified in the product and can be conveniently measured and directly charged to the product. Thus, these materials directly enter the product and form a part of the finished product. For example, timber in furniture making, cloth in dress making, bricks in building a house. The following are normally classified as direct materials :-

- (i) All raw materials, like jute in the manufacture of gunny bags, pig iron in foundry and fruits in canning industry.
- (ii) Materials specifically purchased for a specific job, process or order, like glue for book binding, starch powder for dressing yarn.
- (iii) Parts or components purchased or produced, like batteries for transistor-radios.
- (iv) Primary packing materials like cartons, wrappings, card-board boxes, etc.

(b) Objectives of Cost Accounting:

The following are the main objectives of Cost Accounting:-

- (a) To ascertain the Costs under different situations using different techniques and systems of costing
- (b) To determine the selling prices under different circumstances
- (c) To determine and control efficiency by setting standards for Materials, Labour and Overheads
- (d) To determine the value of closing inventory for preparing financial statements of the concern
- (e) To provide a basis for operating policies which may be determination of Cost Volume relationship, whether to close or operate at a loss, whether to manufacture or buy from market, whether to continue the existing method of production or to replace it by a more improved method of production....etc

(c) Disclosure requirements as per CAS-10 (Limited Revision 2017):

The cost statement shall disclose the following items of Direct Expenses as per CAS-10 (Limited Revision 2017):

- (a) The basis of distribution of direct expenses to cost objects / cost units.
- (b) Quantity and rates of items of direct expenses as applicable.
- (c) Where direct expenses are accounted at standard cost the price and usage variance.

- (d) Direct expenses representing procurement of resources and expenses incurred in connection with resources generated.
- (e) Direct expenses paid or payable to related parties.

(d) Requisites of a good Cost Accounting System are as follows:-

- (i) The cost accounting system should be simple and practical. It should be able to meet the requirements of the organisation.
- (ii) The data and information used by the cost accounting system should be authentic and accurate enough to present accurate reporting in order to facilitate the management for taking right decisions.
- (iii) There is a need for uniformity and consistency in classifying, treating and reporting cost data and information so that it can facilitate comparability of the results of the system.
- (iv) With a view to ensuring clarity of the results there should be integration of the cost accounting system with financial accounting, operation research, statistics, taxation etc.
- (v) The cost accounting system should have enough flexibility in order to accommodate necessary amendments and modifications for the purpose of incorporating changes in technical, regulatory and other requirements.