

Paper-19 - COST AUDIT & MANAGEMENT AUDIT

Full Marks: 100

Section A

Answer any four Questions [4x15=60]

1. (a) From the following figures extracted from the financial and cost accounting records, you are required to compute:
- (i) Value Added.
 - (ii) Ratio of Operating Profit to Sales.
 - (iii) Ratio of Operating Profit to Value Added.

Particulars	₹ in lacs
Net Sales excluding Excise Duty	21,000
Increase in Stock of finished goods	250
Expenses:	
Raw Materials consumed	2,600
Packing materials consumed	1200
Stores and spares consumed	560
Power and fuel	4,600
Repairs and maintenance	200
Insurance	120
Direct salaries and wages	480
Depreciation	885
Interest paid	1,398
Factory overhead:	
Salaries and wages	240
Others	250
Selling and distribution expenses:	
Salaries and wages	120
Additional sales tax	457
Others	1,700
Administration overheads:	
Salaries and wages	120
Others	80

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Answer:

(i) Computation of Value Added	₹ in lacs	₹ in lacs
Net Sales+ Increase in Stock of Finished Goods		21,250
Less:		
Cost of bought out materials and services:		
Raw Materials	2,600	
Packing Materials	1,200	
Stores and Spares	560	
Power and fuel	4,600	
Repairs and Maintenance	200	
Insurance	120	
Other factory overhead	250	
Other Selling & distribution overhead	1,700	
Other Administration overhead	80	11,310
i) Value Added		9,940
Composition of Value Added:		
Depreciation	885	
Interest	1,398	
Additional Sales tax	457	
Salaries and wages (480+240+120+120)	960	3,700
Profit before tax (balancing figure)		6,240
Operating Profit:		
PBT		6,240
Interest paid		1,398
		7,638

(ii) Ratio of operating profit to net sales = $\frac{\text{Operating profit}}{\text{Net sale}} = \frac{7,638}{21,000} \times 100 = 36.37$

(iii) Ratio of operating profit to value added = $\frac{\text{Operating profit}}{\text{Value Added}} = \frac{7,638}{9,940} \times 100 = 76.84$

(b) A company has following four operations undergone by a product under cost audit.

The input, output and employee costs process-wise are given below:

Process	Input M.T.	Output M.T.	Direct employee cost of the process (₹)
A	48,000	43,200	1,29,600
B	50,000	44,000	1,76,000
C	72,000	66,240	3,31,200
D	60,000	55,500	4,44,000

Calculate "Direct employee cost per unit of the product under reference" as required in para 5 of the new Companies (Cost Audit Report) Rules, 2011. [5]

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Answer:

The total employee cost per tonne of the product under audit must be an aggregation of process-wise labour costs after taking into account the good units occurring in each process.

Process	Input	Output	Factor
A	48,000	43,200	48,000/43,200 = 1.1111
B	50,000	44,000	50,000/44,000 = 1.1364
C	72,000	66,240	72,000/66,240 = 1.0870
D	60,000	55,500	60,000/55,500 = 1.0811

Process wise Employee costs per M.T of output are:

- A $129600/43200 = ₹3$
- B $176000/44000 = ₹4$
- C $331200/66240 = ₹5$
- D $444000/55500 = ₹8$

Charging all the above to the finished product from process D,

Process A = ₹ 3

Process B = (₹ 3 x 1.1364) + ₹ 4 = ₹ 7.4092

Process C = (₹ 7.4092 x 1.0870) + ₹ 5 = ₹ 13.0538

Process D = (₹ 13.0538 x 1.0811) + ₹ 8 = ₹ 22.1125

Direct Employee cost per M.T. of Finished Product = ₹ 22.11

2. (a) Based on the following information in respect of a concern manufacturing cement, you are required to offer your comments, as a Cost Auditor on
- (i) the performance of the concern,
 - (ii) your suggestions for improvement:

Year	Given: Rated Capacity 80 MT/Hr.	
	2010	2009
(1) Breakdown (Hrs)	2,164	1,009
(2) Planned maintenance (Hrs)	246	420
(3) Power restrictions (Hrs)	1,230	1,472
(4) Shortfall (there are no orders) (Hrs)	787	673
(5) Want of wagons (Hrs)	492	631
(6) Total stoppage (Hrs)	4,919	4,205
(7) Total running (Hrs)	3,865	4,555
(8) Total available Hours	8,784	8,760
(9) Production during the year (MT)	2,47,360	3,27,960
(10) Hourly Rate of Production (MT) [(9) ÷ (7)]	64	72
(11) Capacity Utilization (%)	61.84	81.99
Annual Installed Capacity	4,00,000 MT	

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Answer:

(i) Performance of the concern:

Rated Capacity = 80 MT/Hr.

Rated Capacity achieved in 2009 = $(72/80) \times 100 = 90\%$

Rated Capacity achieved in 2010 = $(64/80) \times 100 = 80\%$

Thus the capacity achievement as a % of the rated capacity has come down from 90% to 80% in 2010.

(ii) Further the capacity utilization has gone down to 61.84% in 2010 as against the figure of 81.99% in 2009 i.e., a reduction by 20.15%

(iii) From the data available, the following observations are noted:

(a) Breakdown hours have gone up from 1,009 Hrs. to 2,164 Hrs., i.e. by 114.47%

(b) Planned maintenance Hrs. has reduced from 420 Hrs. to 246 Hrs., i.e. by 41.43%

(c) Shortfall Hrs. due to No. of orders has increased from 673 Hrs. to 787 Hrs., i.e. by 16.94%

(d) The total stoppage Hrs. has increased from 4,205 Hrs. to 4,919 Hrs., i.e. by 16.98%

(e) The total running Hrs. has come down to 4,555 Hrs. to 3,865 Hrs., i.e. by 15.15%

(f) The production has come down from 3,27,960 MT to 2,47,360 MT., i.e. by 24.58%

From the above findings, it is ascertained that the under utilization of capacity to the extent of 20% can be attributed mainly to the

(i) increased total stoppage Hrs. of 4,919 in 2010 as against that of 4,205 Hrs. in 2009.

(ii) the net increase of 714 Hrs. (i.e. 4,919 – 4,205 Hrs.) is again due the increase of break down Hours by 1,155 Hrs. (i.e. 2,164 – 1,009 Hrs.) in the year 2010 over the year 2009.

Further from the given data, it is noted that:

Year	2010	2009
Breakdown (Hrs.)	2,164	1,009
Total stoppage (Hrs.)	4,919	4,205

Percentage of breakdown Hrs.

$$\begin{aligned} \text{as \% of total stoppage Hrs.} &= (2,164/4,919) \times 100 && (1,009/4,205) \times 100 \\ &= 44\% && 24\% \end{aligned}$$

Thus the performance has deteriorated steeply in the year 2010 as compared to the performance in the year 2009.

Suggestions:

The management is advised to:

(i) Augment its planned maintenance with a view to reducing breakdown hours.

(ii) Install Power Generation sets with a view to compensate the hours lost due to Power restriction.

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(b) A company has following four operations undergone by a product under cost audit. The input, output and Material costs process-wise are given below:

Process	Input M.T.	Output M.T.	Direct Material cost of the process (₹)
A	52,000	46,800	1,87,200
B	55,000	49,500	2,22,750
C	69,000	66,240	2,81,520
D	65,000	60,125	3,96,825

Calculate "Direct Material cost per unit of the product under reference" as required in para 5 of the new Companies (Cost Audit Report) Rules, 2011 [5]

Answer:

The total Material cost per tonne of the product under audit must be an aggregation of process-wise material costs after taking into account the good units occurring in each process.

Process	Input	Output	Factor
A	52,000	46,800	$52,000/46,800 = 1.1111$
B	55,000	49,500	$55,000/49,500 = 1.1111$
C	69,000	66,240	$69,000/66,240 = 1.0417$
D	65,000	60,125	$65,000/60,125 = 1.0811$

Process wise material costs per M.T of output are:

- A $1,87,200/46,800 = ₹4.00$
- B $2,22,750/49,500 = ₹4.50$
- C $2,81,520/66,240 = ₹4.25$
- D $3,96,825/60,125 = ₹6.60$

Charging all the above to the finished product from process D,

Process A = ₹ 4.00

Process B = $(₹ 4 \times 1.1111) + ₹ 4.50 = ₹8.9444$

Process C = $(₹8.9444 \times 1.0417) + ₹4.25 = ₹ 13.5674$

Process D = $(₹13.5674 \times 1.0811) + ₹ 6.60 = ₹ 21.2677$

Direct Labour cost per M.T. of Finished Product = ₹21.27

3. (a) Comment on the following:

- (i) A company has not maintained cost accounting records though having the obligation under Section 209(1)(d) notification. The management is of the opinion that necessary steps could be taken after the cost audit order is received from Government. Are the Directors of the Company absolved of the obligation to maintain cost accounting records?
- (ii) A company receives the Cost Audit report for a period after filing of the Income Tax Return. Is the company required to submit a copy of the report to the ITO? If yes, what is the period by which the Report must be so filed?

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- (iii) During plant stoppages, the operational labour is being utilized by the company for cleaning, oiling, and such other routine jobs of the same plant. Their wages for the period also are treated as direct wages in cost of production.
- (iv) Sugar mills use bagasse as fuel in the boilers. One sugar mill has not valued bagasse as according to the management it has incurred no cost in acquiring it. What is the requirement under 209(1)(d) regulations relating to sugar? [8]

Answer:

- (i) The obligation to maintain cost accounting records as per the rules provided under Section 209(1)(d) is a continuing one independent of whether cost audit is ordered or not. The financial auditor also has an obligation to certify under CARO that such records have been maintained. The directors of the company cannot be absolved of the obligation as per the Rules 3 and 4 of the Section 209(1)(d) regulation.
- (ii) Sections 139(9)(e) of the Income Tax Act, 1961 requires the filing of the Cost Audit Reports along with the Income Tax return wherein an audit is ordered. Where the cost audit report is delayed beyond the date for filing of the IT Return, the Company is bound by law to submit a copy of the report to the IT authorities. There is no time limit specified for this. This must be done within a reasonable time as per general construction of law.
- (iii) Where operating workers are required to perform certain type of work which otherwise falls in the category of indirect labour, like oiling, cleaning, maintenance etc., their wages should be treated as indirect wages and accordingly be included in overhead.
- (iv) Bagasse is a byproduct in sugar industry, which has a realizable value. As the company is using bagasse as a fuel to produce steam, the bagasse should be valued at its realizable value. In absence of a market price, bagasse may be valued on the basis of average pithead price of coal after converting the weight of bagasse into equivalent coal adopting a thermal equivalency.

(b) What are 'waste multipliers' in textile costing? The following are the process wise wastages on inputs in the year 2011-12.

Process	% age of Wastages on Input
Blow Room	9.18
Carding	7.17
Drawing	1.10
Roving (Simplex)	0.30
Ring Frame (Spinning)	7.21
Reeling and Winding	1.50

From the above, calculate the process wise waste multiplier factor. [7]

Answer:

Under Section 209(1)(d) rules for the Textile Industry, processing cost/kg of output is worked out first. These costs are then aggregated to arrive at total yarn cost. This is done by using a factor known as "waste multiplier". Accordingly, waste multiplier is that quantity of output from any process, which will be needed to get one unit of final output.

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Process	%age of wastages on input	Net output for 100 units of input	Waste multiplier (WM ₀₋₆)
Total	–	100	1.3161
Blow Room	9.18	100 – 9.18 = 90.82	1.1953
Carding	7.17	90.82 – 6.51 = 84.31	1.1096
Drawing	1.10	84.31 – 0.93 = 83.38	1.0974
Roving (Simplex)	0.30	83.38 – 0.25 = 83.13	1.0941
Ring Frame (Spinning)	7.21	83.13 – 5.99 = 77.14	1.0153
Reeling and Winding	1.50	77.14 – 1.16 = 75.98	1.0000

Calculation:-

$$WM_0 = \frac{\text{Actual Input}}{\text{Final Net Output}} = \frac{100}{75.98} = 1.3161$$

$$WM_1 = \frac{WM_0 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 90.82}{100} = 1.1953$$

$$WM_2 = \frac{WM_1 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 84.31}{100} = 1.1096$$

$$WM_3 = \frac{WM_1 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 83.38}{100} = 1.0974$$

$$WM_4 = \frac{WM_1 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 83.13}{100} = 1.0941$$

$$WM_5 = \frac{WM_1 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 77.14}{100} = 1.0153$$

$$WM_6 = \frac{WM_1 \times \text{Net Output}}{\text{Actual Input}} = \frac{1.3161 \times 75.98}{100} = 1.0000$$

4. (a) The following figures are extracted from the Financial Accounts of BSL Ltd. for the year ended 31-03-2012:

	₹	₹
Sales (20,000 units)		50,00,000
Materials		20,00,000
Wages		10,00,000
Factory Overheads		9,00,000
Administrative Overheads		5,20,000
Selling and Distribution Overheads		3,60,000
Finished Goods (1,230 units)		3,00,000
Work-in-progress:		
Materials	60,000	
Labour	40,000	

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Factory Overheads	<u>40,000</u>	1,40,000
Goodwill Written off		4,00,000
Interest paid on capital		40,000

In the costing records, Factory Overhead is charged at 100% of Wages, Administration Overhead 10% factory cost and Selling and Distribution Overhead at the rate of ₹ 20 per unit sold.

Prepare a statement reconciling the profit as per Cost Records with the profit as per Financial Records. [8]

Answer:

BSL Ltd.			
Profit & Loss Account			
(For the year ended 31 st March, 2012)			
Dr.			Cr.
Particulars	₹	Particulars	₹
To Opening Stock	Nil	By Sales (20,000 units)	50,00,000
To Materials	20,000	By Closing Stock (1,230 units)	3,00,000
To Wages	10,00,000	By Work-in-progress	1,40,000
To Factory Overheads	9,00,000		
To Administrative Overheads	5,20,000		
To Selling & Distribution Overheads	3,60,000		
To Goodwill written off	4,00,000		
To Interest on Capital	40,000		
To Net Profit	2,20,000		
	54,40,000		54,40,000

Cost Profit & Loss Statement	
(For the year ended 31 st March, 2012)	
Particulars	₹
Materials	20,00,000
Wages	10,00,000
Prime Cost	30,00,000
Add: Factory Overhead @ 100% of wages	10,00,000
	40,00,000
Less: Closing Work-in-progress	1,40,000
Factory Cost (20,000 + 1,230) units	38,60,000
Administrative Overheads @ 10% of Factory Cost	3,86,000
	42,46,000
Less: Closing Stock of Finished Goods 1,230 units (See Note)	2,46,000
Cost of Production (20,000 units)	40,00,000
Selling & Distribution Overhead @ ₹20 per unit	4,00,000

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Cost of Sales (20,000 units)	44,00,000
Sales Revenue (20,000 units)	50,00,000
Profit	6,00,000

Note: Cost of 21,230 units is ₹ 42,46,000. Therefore, the cost of one unit is ₹ 200. Hence the cost of 1,230 units is ₹ 2,46,000.

Alternatively: Administrative overheads could be excluded from the cost of production.

Reconciliation Statement			
Particulars	₹	₹	
Profit as per Cost Records		6,00,000	
Add: Factory Overheads over-absorbed			
(₹ 10,00,000 – ₹ 9,00,000)	1,00,000		
Selling & Distribution Overhead Over-absorbed			
(₹ 4,00,000 – ₹ 3,60,000)	40,000		
Difference in the valuation of closing stock of finished goods			
(₹ 3,00,000 – ₹ 2,46,000)	<u>54,000</u>	<u>1,94,000</u>	
		7,94,000	
Less: Administrative Overhead Under-absorbed			
(₹ 5,20,000 – ₹ 3,86,000)	1,34,000		
Goodwill written off relates to Financial Accounts	4,00,000		
Interest on Capital	<u>40,000</u>	<u>5,74,000</u>	
Profit as per Financial Accounts		<u>2,20,000</u>	

(b) What as a Cost Auditor, will you verify in the area of work-in-progress?

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Answer:

The Cost Auditor should verify the following area of work-in-progress:

- (i) That the work-in-progress has been physically verified and it agrees with the quantity shown in job-cards of uncompleted work.
- (ii) That the valuation of the work-in-progress is correct with reference to the stage of completion of each job or process and the value job cost cards or process cost sheet.
- (iii) That there is no over-valuation or under valuation of opening work-in-progress or closing work-in-progress, thereby artificially, pushing up and down net profits or net assets as the case may be.
- (iv) That the volume and value of work-in-progress is not disproportionate as compared with finished production.

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(c) Whether separate Form 23C is required to be filed by a company having two or more different types of products covered under cost audit? [2]

Answer:

The company would be required to file individual Form 23C for each product under reference even if the same auditor is appointed for all the products.

- 5. (a) In dealing with the financial position of a company as per para 9 of the Annexure in line with new Companies (Cost audit Report) Rules, 2011, state your opinion regarding:**
- (i) Is the Capital Employed to be computed as at the beginning of the accounting period or at the end of the accounting period or average of both?**
 - (ii) Should investments like National Savings Certificates deposited with Government authorities for Sales Tax, Excise etc. as security be treated as investments outside the business?**
 - (iii) How is 'net worth' defined in this para? The para also states "if there is any change in the composition of the net worth during the year, special mention may be made along with the reasons there for." How would you take care of this provision?**
 - (iv) Should the net sales figure include other service charges and jobbing income?**
 - (v) In case the financial accounts of the company are yet to be finalized and audited, should the cost auditor provide the data under para 9 in line with new Companies (Cost Audit Report) Rules, 2011? [10]**

Answer:

- (i) Capital employed has been defined in the Rules as average of net fixed assets plus net current assets existing at the beginning and close of the financial year.
- (ii) Such investments are in normal course of business and for the business, therefore these cannot be treated as investments outside the business.
- (iii) The term 'net worth' has been defined as share capital plus reserves and surplus (excluding revaluation reserve) less accumulated losses and intangible assets. In other words it can be calculated as under:

Share Capital (paid up capital- equity and preference)	**
Add: Reserves and Surplus	**
Less: Revaluation Reserve	**
Less: Intangible Assets	**
Less: Profit and Loss A/c (Debit balance)	**
Less: Misc/ deferred expenditure	**

In the definition of Net Worth provided under the Rules, there is no reference to the funds deployed by the company in Capital Work-in-progress and Fixed Assets held for sale. However, the intent of the law here is to measure the operational efficiency of the

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funds deployed by the company in operations. Keeping this principle in mind, it would be appropriate if the shareholders' funds deployed for Non-operational Assets, such as, Capital Work-in-Progress and Fixed Assets held for sale be excluded from the calculation of operational Net Worth.

A reconciliation of net worth in following form may be provided:

Net worth at the beginning of the year	**
Add: increase in capital	
Add: increase in reserve	
Less: Decrease in reserves	
Less: Any loss during the year	
Less: Any acquisition of intangible asset or incurrence of expenses treating as deferred	
Net worth at the end of the year	**

- (iv) If other service charges and jobbing income are a regular part of the activity and are of material value these can be treated as sales, otherwise not to be so considered.
- (v) Where the financial accounts have not been finalized at the time of submission of the Cost Audit Report, Cost Auditor may indicate in his report all financial data under para 9 are on the basis of the unaudited or provisional accounts. This is necessary as all cost statements contain a lot of data which have a linkage to the financial accounts. After the accounts have been finalized, a supplementary cost audit report should be submitted as soon as the audited accounts are made available.

(b) Following data is available for a company relating to the cost of production of a product subjected to Cost Audit. Prepare the Export Profitability Statement to be included in the Annexure to the Cost of Production of 10,000 units.

	₹
Sales (local) 9,000 units	2,02,500
Sales (export) 1,000 units	20,000
Material consumed 20 tonnes @₹5 kg.	1,00,000
Imported Component @ ₹3/unit	30,000
Direct Labour	10,000
Factory Overhead	15,000
Administrative Overhead	5,000
Freight & Packing (local sales)	4,500
Packing for export	2,000
Handling at port	500
Opening Work-in-progress	10,000
Closing Work-in-progress	5,000

Additional Information:

- (i) Export incentive of 10% on F.O.B is receivables.
(ii) Draw Back on duty paid on raw materials and components available on export is ₹2,500.

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Answer:

Taking into consideration the requirements under provisions of Cost Audit (Report) Rules, like showing separately local and export sales, with details like quantity, net realization, price per unit, packing charges etc., Profitability Statements have been prepared as follows:

Statement of Cost of Production

	Total cost (₹)	Per unit cost (₹)
Production: 10,000 units		
Direct Materials (20,000 Kgs. @ ₹5 per Kg)	1,00,000	10.00
Imported components (10,000 units @ ₹3/unit)	30,000	3.00
Direct Labour	10,000	1.00
Prime Cost	<u>1,40,000</u>	14.00
Factory Overhead	15,000	1.50
Opening WIP	<u>10,000</u>	1.00
	1,65,000	16.50
Less: Closing WIP	<u>5,000</u>	0.50
Works Cost	1,60,000	16.00
Administrative Overhead	<u>5,000</u>	0.50
Cost of Production	<u>1,65,000</u>	16.5

Statement of Cost and Profit on Export Sales

	Total cost (₹)	Per unit cost (₹)
Export Sales: 1,000 units		
Cost of production	16,500	16.50
Export packing	2,000	2.00
Handling at port	<u>500</u>	0.5
(A) Cost of Sales	<u>19,000</u>	19.00
Export Sales realisation	20,000	20.00
Export incentive @ 10% of F.O.B	2,000	2.00
Duty Drawback on components	<u>2,500</u>	2.50
(B) Total realisation	<u>24,500</u>	24.5
Profit on Export (B)-(A)	<u>5,500</u>	5.5

Section B
Answer any two Questions [2x10=20]

6. (a) What is productivity audit? Describe the steps involved and the measures used in this audit. [5]

Answer:

Productivity audit is the process of monitoring and evaluating organizational practices to determine whether functions, programmes, and organization itself are utilizing resources effectively and efficiently so as to accomplish objectives.

It is measured in terms of outputs and inputs in relation to the three major factors of production i.e. material, labour and capital. The measurement used in relationship between outputs and inputs measured in physical and/or financial terms.

Productivity audit concentrates on areas such as:

- (i) productivity actions
- (ii) resource availability
- (iii) performance standards
- (iv) benefit allocation
- (v) productivity policies
- (vi) equipment usage
- (vii) accountability reporting
- (viii) resource allocation.

The measures of productivity for three factors of production:

Material productivity:

- (i) Obtaining higher output for same input.
- (ii) Obtaining same output with lower input

Labour productivity:

- (i) Labour hour per unit of product.
- (ii) Output per man hour.
- (iii) Added value per capita or per rupee of labour cost.

Capital productivity:

- (i) Physical output per rupee of investment.
- (ii) Value of production per rupee of investment.
- (iii) Value added per rupee of investment.

The audit is done by

- (i) Ratio analysis
 - Return on capital employed
 - Return on sales
- (ii) Capacity utilization of plant, equipments and facilities against available capacity
- (iii) Material consumption against bench marks.

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(iv) Productivity analysis of man hours in time and cost.

Productivity audit consists of following steps:

- (i) Setting of standards for different factors of production.
- (ii) Choosing yardsticks for measurement of each of the factors.
- (iii) Comparing actual performance with standards and identifying variances.
- (iv) Making recommendations for control action.

(b) You are the Management Auditor of a large manufacturing company suffering from working capital crunch. What are the related areas which you would probe into to overcome the company's problem. [5]

Answer:

Adequate working capital is required for liquidity and smooth operations of the company. To ensure an adequate flow of working capital to the manufacturing company, the following action plan may be considered:

- (i) Working Capital Estimation: The company should start by preparing a statement of the projected working capital requirements. This should be based on the functional budgets in sales, production, expenses, capital expenditure and the Master Budget consisting of projected profit and loss and the Balance Sheet.
- (ii) Cash Flow Statement/Cash Budget: Month-wise cash budgets showing inflows and outflows of cash head-wise should be prepared to analyse the major inflows and outflows affecting the entity. At this stage any wasteful outflow can be traced and eliminated. Bank reconciliation should be undertaken periodically so that outstandings can be traced and acted upon. This is also necessary to reduce the float time.
- (iii) Inventory/Stock Management: Raw materials and inventories should be classified properly to determine the level of stock of materials. The method of costing also needs to be looked at minutely. There is a need to establish linkage with the production pattern and work backwards accounting for time factor in receipt of material. This needs to be worked out carefully since at no cost, production schedule should be hampered. The cautions also need to be exercised that there is no unused/obsolete inventory. The system of inventory management needs to be looked at so as to check the avoidable wastes/scrap generated during storage and handling. Just in time philosophy will enable the company to reduce processing time, stocks and related costs. The adoption of such a mechanism would bring down the cost to a considerable extent.
- (iv) Credit Management: The company should lay down a proper policy for evaluating customers, determining the credit period and offering discounts for early payment. An age-wise analysis of debtors should also be prepared so as to avoid credit to defaulters. The sale departments need to be geared up so that realisation can be made in time. A careful analysis should be done of various customers according to pattern of sales so as to exercise control on their respective debit balances. The company should through its purchase department endeavour to avail the maximum credit period from its creditors. This would enhance the working capital of the company.
- (v) Funds Flow Analysis: The Company should prepare a funds flow analysis, distinguishing between long-term and short-term sources and applications.
- (vi) Investment Management: The idle funds of the company, if any, should be invested in short-term securities to augment the income.

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- (vii) WIP Analysis: Minimum WIP should be monitored and for the purpose it is necessary to ensure that no bottlenecks develop at any stage during the production process.

7. (a) Draft an "Audit Programme" as a Cost Auditor after being appointed for Cenvat Credit Audit. [5]

Answer:

The " Audit Programme" of Cenvat Credit Audit should include the following :

- (1)
 - (i) Name of the Auditee.
 - (ii) Address/ Location of the Auditee.
 - (iii) Period to be covered.
 - (iv) Estimated time(days) required.
 - (v) Audit team members consisting of Partners/Qualified/Semi-qualified staff required.
 - (vi) Queries of the Auditor to be settled by the representative of the concern.
 - (vii) Report to be submitted to the representative of the company.
- (2) Review of Manufacturing Process.
- (3) Review of Bill of Materials.
- (4) Review of Statutory details:
 - (i) Classification of Input to Output.
 - (ii) MSN Nomenclature etc.
- (5) Input checking
 - (i) Raw Materials
 - (ii) Packing Materials.
- (6) Batch record checking.
- (7) Yield Analysis-Input consumption and Output Yield.
- (8) Cenvat Records-
 - (i) PLA Register
 - (ii) Amount Claimed and Claimable against Raw Material and Capital Goods.
 - (iii) Summary Statement of Cenvat Credit.
 - (iv) Vendor Invoices etc.

Review and checking of the documents of Notices/Show Cause/Litigation matter in respect of Cenvat Audit.

(b) For what purposes the Cost Auditor refers to financial records while conducting Cost Audit of an entity? [5]

Answer:

A cost auditor is ultimately required to express an opinion as to whether the company has maintained proper cost accounting records so as to give a true and fair view of cost of production, etc. In arriving at this opinion, the cost auditor is required to ascertain about multitude of information such as cost of raw materials consumed, cost of power, cost of stock, employer costs, provision for depreciation, royalty and technical payment, abnormal cost, scrap, fuel etc. Annexure to the cost audit reports require detailed information in respect of

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financial position including capital employed, net worth, profit, net rates, operating profit, unit cost of power and fuel, total wages and salaries, etc. It is obvious therefore that cost audit cannot be done without reference to financial books, more so in the context of the statutory requirement to have a statement of reconciliation with financial accounts as part of cost audit report. Further the cost statements also contain a summary of all expenditure incurred by the company and the share in such expenditure attributable to the activities covered by Cost Accounting Records Rules; Overhead expenditure also needs allocation between activities covered by rules and activities not so covered. Naturally this can be done only with reference to financial ledger. Under Part II of Schedule VI to the Companies Act, 1956, quite a few matters which are to be mentioned in the Profit and Loss Account of the company are also to be covered in cost statements such as consumption of raw materials in quantity and value, sale of finished goods under classified headings in quantity and nature, actual production quantity of value, inventory in quantity of value for each class of goods, etc. A correlation between consumption of raw materials as per cost records and financial records may throw up the need for inquiry into errors, mistakes and manipulation. Material discrepancy between financial records and cost records will be highlighted in the reconciliation statement which would require that the cost auditor may examine deviation before reporting on the same. Thus it is imperative for the cost auditor to refer to financial records for conducting the cost audit.

8. (a) As a management auditor of an engineering company, you are requested to submit a report to the management suggesting suitable control procedures for wastage, scrap, spoilage and obsolescence of materials. Draft a report explaining the areas, which you would like to highlight. [5]

Answer:

The Managing Director,
M/s ABC Ltd.,

Date:

Respected Sir,

Sub: Control procedures for Wastage, Scrap, Spoilage and Obsolescence

With reference to your letter dated requesting us to examine and report on the system of control and accounting of scrap, wastage, spoilages etc., in your company we would like to suggest the introduction of the following procedures/controls, with a view to ensure proper control:

Procedures/controls, with a view to ensure proper control:

- For identification of waste, scrap, spoilage and obsolete materials, standards based on their values and utility will have to be fixed.
- Output should be measured at the time of production and means to determine whether the quantity of scrap generated is normal or excessive should be established.
- Basis for reconditioning or reusing, the scrap materials should be fixed.
- The scrap generated should be properly accounted for, to avoid misappropriation. Proper arrangement should be introduced for their storage.
- The scrap should be properly graded, taking into account their utility and realizable value.
- Responsibility for sale of scrap should be fixed and scrap should be sold out at periodical intervals.

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

- Standard ratios should be developed to control the occurrence of spoilage depending on the conditions either normal or abnormal. Proper recording and reporting of spoilages should be done. Control over the storage and handling of spoilages should be introduced.
- Proper basis should be introduced for reprocessing or for disposal of spoilages.
- Spoilages should be accounted for at the point of their production.
- Method of utilization of spoilages should be standardized.
- On regular basis, reports w.r.t slow moving and non-moving materials should be obtained and action taken to prevent unnecessary purchasing.
- System should be developed for keeping track of obsolescence items.

We would request you to kindly initiate steps for implementation of the above suggestions. Please feel free to ask for clarifications, if any.

Always we remain at your service.

Yours faithfully,

XXXX

(Management Auditor)

(b) Write short notes on disclosure and transparency of Corporate Governance.

[5]

Answer:

Disclosure and transparency of Corporate Governance include the followings:

1. Disclosure should include, but not be limited to, material information on:
 - (a) The financial and operating results of the company.
 - (b) Company objectives
 - (c) Membership of the board and key objectives, and their remuneration.
 - (d) Material foreseeable factors
 - (e) Material issue regarding employees and other stakeholders.
 - (f) Governance structures and policies.
2. Information should be prepared, audited and disclosed in accordance with high quality standards of accounting, financial and non-financial disclosure and audit.
3. An annual audit should be conducted by an independent auditor in order to provide an external and objective assurance on the way in which financial statements have been prepared and presented.
4. Channels for disseminating information should provide for fair, timely and Cost efficient access to relevant information by users.

Section C

Answer any two Questions [2x10=20]

9. (a) The following is the abridged Balance Sheet of BRL Batteries Ltd:

	₹ in lacs	
	31.3.2013	31.3.2012
Liabilities:		
Share Capital	450	450
Debenture Redemption Reserve	25	30
Capital subsidy from State Government	30	30
Revaluation Reserve	125	140
General Reserve	160	120
Balance in Profit and Loss A/c	48	32
Secured Loans	275	295
Unsecured Loans	123	117
	1236	1214
Assets:		
Gross Block	725	680
Accumulated Depreciation	(315)	(290)
Capital WIP	43	37
Investments	165	165
Current Assets:		
Inventories	417	441
Sundry Debtors	182	195
Advances for Capital Equipment	24	17
Other Loans & Advances	144	137
Cash and Bank Balances	21	19
Current Liabilities:		
Sundry Creditors		
For Capital Expenses	(17)	(21)
For others	(185)	(197)
Provision for Taxes	(64)	(71)
Misc. Expenses	96	102
Total	1236	1214

Notes:

- (i) Fixed Assets include Goodwill and Patents ₹122 lacs (Previous year ₹137 lacs)
- (ii) Term loans due for repayment within 12 months are ₹96 lacs (Previous year ₹ 84 lacs)

Calculate & analyse the following for the company as a whole:

- (i) Capital Employed for the year ended 31.3.13
- (ii) Net worth as on 31.3.12 and 31.3.13
- (iii) Debt/ Equity Ratio as on 31.3.2013

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

Answer:

Capital Employed:	(₹ in lakhs)	
	31.3.13	31.3.12
Gross Block	725	680
Less: Depreciation	<u>315</u>	<u>290</u>
Net Block	410	390
Less: Goodwill & Patents	<u>122</u>	<u>137</u>
Net Fixed Assets	<u>288</u>	<u>253</u>
Current Assets:		
Inventories	417	441
Sundry Debtors	182	195
Advance for Capital Equipment	24	17
Other Loans & Advances	144	137
Cash and Bank Balances	<u>21</u>	<u>19</u>
(A)	<u>788</u>	<u>809</u>
Current Liabilities		
Term loan due for repayment within 12 months	96	84
Sundry Creditors		
- For Capital	17	21
- For others	185	197
Provision for Taxes	<u>64</u>	<u>71</u>
(B)	<u>362</u>	<u>373</u>
Working capital (A - B)	426	436
Capital Employed (Net Fixed Assets + Working Capital)	714	689

Capital Employed = $(714 + 689)/2 = 701.50$ lacs.

(ii) Net worth:

	₹ in lacs	₹ in lacs
	31.3.13	31.3.12
Share Capital	450	450
General Reserve (including Debenture Redemption Reserve)	185	150
Capital subsidy from State Government	30	30
Balance in P&L A/c	<u>48</u>	<u>32</u>
	713	662
Less: Intangible Assets	122	137
Less: Capital WIP	43	37
Less: Misc. Expenditure	<u>96</u>	<u>102</u>
Net worth	<u>452</u>	<u>386</u>

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

(iii) Debt- Equity Ratio:

	31.3.13	31.3.12
<u>Debt</u>		
Debt (Secured & Unsecured Loans)	398	412
Less: Due in 12 months	<u>96</u>	<u>84</u>
Long term debt	<u>302</u>	<u>328</u>
 <u>Equity</u>		
Share Capital	450	450
General reserve	160	120
Debenture Redemption Reserve	25	30
Balance in Profit and Loss A/c	48	32
Capital subsidy from State Government	30	30
Less: Misc. Expenses	<u>(96)</u>	<u>(102)</u>
	<u>617</u>	<u>560</u>
 Debt Equity Ratio	 0.49:1	 0.59:1

Note:

- (i) There is no existing liability towards Debenture-holder of the Company. So, balance in Debenture Redemption Reserve Account is treated as part of Reserve & Surplus.
- (ii) As per Accounting Standard 12 "Accounting for Government Grants" under Capital approach – Grant is treated as part of Shareholder's Funds. So, Capital subsidy is taken for the calculation of Capital Employed and for the calculation of Net Worth.

(b) As a manager of a financial service company, you have received a proposal seeking a term loan, from a firm that is planning an investment in a Fixed Asset of ₹800 lakhs, in a new project. The loan is indicated to be repayable in three annual installment commencing from the end of the 2nd year. The following information concerning the project is available:

	₹ in lakhs			
	Year 1	Year 2	Year 3	Year 4
Gross Profit [before depreciation]	150	200	300	300
Depreciation	100	90	80	70
Interest on Term Loan	50	90	60	30
Working Capital borrowing	12	18	24	24
Provision for Tax	-	-	20	60

Assuming other techno-economic criteria to be satisfactory, you are required to:

- a. Compute any three Ratios which, in your opinion, would guide the financial decision.
- b. Interpret briefly such ratio and give views on the proposal.

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

Answer:

$$(a) (i) \text{ Return on Investment} = \frac{\text{Net Profit before Interest \& Tax}}{\text{Capital Employed}} \times 100$$

Calculation of Net Profit before Interest & Tax

	₹ in lakhs			
	Year 1	Year 2	Year 3	Year 4
Gross Profit [before depreciation]	150	200	300	300
Depreciation	100	90	80	70
Interest on Term Loan	50	90	60	30
Profit before tax	Nil	20	160	200
Provision for Tax	-	-	20	60
Profit after tax (PAT)	Nil	20	140	140
Add: Interest on term loan	50	90	60	30
Add: Provision for tax	-	-	20	60
Net Profit before Interest & Tax	50	110	220	230
Less: Working Capital borrowing	12	18	24	24
	38	92	196	206

$$\text{Average return on Investment (before tax)} = (38 + 92 + 196 + 206) / 4 = 133$$

$$\therefore \text{Return on Investment (before tax)} = \frac{133}{800} \times 100 = 16.63\%$$

$$\text{Average return on Investment (before tax)} = [(38 + 92 + (196 + 20)) + (206 + 60)] / 4 = 153$$

$$\therefore \text{Return on Investment (After tax)} = \frac{153}{800} \times 100 = 19.13\%$$

Comments -

It indicates the rate of return earned by an enterprise from its total Capital employed in the business. It is also an indicator of the profit earning capacity of an enterprise. A higher return reveals a better profitability on the Capital Employed in the business.

$$(ii) \text{ Debt Service Coverage Ratio} = \frac{\text{Earning for Debt Service}}{\text{Interest + Installment}}$$

Earning for Debt Service = Net profit after Taxation + Interest on Debt Funds + Non-Cash Operating Expenses

	₹ in lakhs			
	Year 1	Year 2	Year 3	Year 4
Profit after tax (PAT)	Nil	20	140	140
Add: Interest on term loan	50	90	60	30
Add: Depreciation	100	90	80	70
Net Profit before Interest & Depreciation but after tax	150	200	280	240
Interest + Installment	50	356.67	326.67	296.66
Debt Service Coverage Ratio	3.00	0.56	0.86	0.81

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

Comments –

It indicates extent of current earnings available for meeting commitments of interest and installment. Ideal ratio must be between 2 to 3 times.

$$(iii) \text{ Interest Coverage ratio} = \frac{\text{EBIT}}{\text{Interest Expenses}}$$

	₹ in lakhs			
	Year 1	Year 2	Year 3	Year 4
Profit after tax (PAT)	Nil	20	140	140
Add: Interest on term loan	50	90	60	30
Add: Tax	-	-	20	60
EBIT	50	110	220	230
Less: WC borrowing	12	18	24	24
EBIT after WC borrowing	38	92	196	206
Interest Expenses	50	90	60	30
Interest Coverage ratio	0.76	1.02	3.27	6.87

Comments –

It indicates ability to meet interest obligation of the current year, should generally be greater than 1.

(b) The project will not earn a satisfactory ROI and the term-loan borrowing will seriously create a liquidity problem of the firm.

(c) The Balance Sheet of Rishi Ltd. stood as follows as on:

(₹ in Lakhs)

Liabilities	31 March 2012	31 March 2011	Assets	31 March 2012	31 March 2011
Capital	500	500	Fixed Assets	800	600
Reserves	232	200	Less: Depreciation	280	200
Loans	200	240		520	400
Creditors & Others			Investment	80	60
Current Liabilities	258	50	Stock	240	200
			Debtors	140	100
			Cash & Bank	40	40
			Other Current assets	50	50
			Miscellaneous Expenditure	120	140
	1,190	990		1,190	990

You are given the following information for the year 2011-12:

	₹ in Lakhs
Sales	1,200
Profit before Interest & Tax	300
Interest	48

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

Provision for Tax	120
Proposed Dividend	100

Required:

- i. Calculate for the year 2011-12:
 - a. Return on Capital Employed.
 - b. Stock Turnover Ratio.
 - c. Return on Net Worth.
 - d. Current Ratio.
 - e. Proprietary Ratio
- ii. Give a brief comment on the financial position of Rishi Ltd.

Answer:

(a) Computation of Capital Employed –

	2012	2011
Fixed Assets	800	600
Less: Depreciation	280	200
	520	400

Current Assets		
Stock	240	200
Debtors	140	100
Cash & Bank	40	40
Other current assets	50	50
	470	390

Current Liability	258	50
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Working capital	212	340
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Net Fixed Assets + Working Capital	732	740
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Average Capital Employed = $(732 + 740)/2 = 736$

Total Earning = Profit after tax + Interest on debt funds + Non-Operating Adjustments
 = $(300 - 48 - 120) + 48$
 = 180

$$\begin{aligned} \therefore \text{Return on Capital Employed} &= \frac{\text{Total Earning}}{\text{Average Capital Employed}} \\ &= \frac{180}{736} \times 100 = 24.46\% \end{aligned}$$

(b) Computation of Stock Turnover Ratio = $\frac{\text{Net sales Excluding Excise Duty \& Sales Tax}}{\text{Average Stock}}$

Answer to PTP_Final_Syllabus 2012_Dec2013_Set 2

$$= \frac{1,200}{(240 + 200)/2} = 5.45 \text{ times}$$

$$(C) \text{ Return on Net Worth} = \frac{\text{Total Earning}}{\text{Average Net Worth}}$$

Net Worth = Share Capital + Reserve & Surplus – Revaluation reserve – Intangible assets – Accumulated losses, if any

$$\text{Net Worth} = 500 + 232 - 120 = 612$$

$$\text{Return on Net Worth} = \frac{180}{612} = 29.41\%$$

$$(d) \text{ Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Current Ratio} = \frac{470}{258} = 1.82$$

$$(e) \text{ Proprietary Ratio} = \frac{\text{Proprietary Funds}}{\text{Total Assets}}$$

Proprietary Ratio = Equity Share Capital + Preference Share Capital + reserve & Surplus – Accumulated Losses

$$= 500 + 232 - 120 = 612$$

Total Assets = Net Fixed assets + Total Current Assets (Only tangible assets will be included)

$$= 520 + 470 = 990$$

$$\text{Proprietary Ratio} = \frac{612}{990} = 0.62$$