FINAL EXAMINATION
GROUP IV
(SYLLABUS 2012)

SUGGESTED ANSWERS TO QUESTIONS
DECEMBER 2014

Paper-19: COST AND MANAGEMENT AUDIT

Time Allowed : 3 Hours **Full Marks : 100**

The figures in the margin on the right side indicate full marks.

The paper is divided in three sections.

Section A - Answer any four questions (15x4=60 marks)
Section B - Answer any four questions (10x2=20 marks)
Section C - Answer any four questions (10x2=20 marks)

Section A (60 marks)
Answer any four questions.

15x4=60

1. (a) Premiere manufacturer Ltd. received an enquiry for 2,50,000 numbers of special type of machine parts. Capacity of the company exists for manufacturing the parts, but a fixed investment of ₹ 95,000 and working capital of to the extent of 35% of Sales value will be required to undertake the job.
The cost estimates are as follows:
Raw materials 40,000 kg. at ₹ 3.00 per kg.
Labour hours 12,000 of which 800 would be overtime payable at double the normal rate.
Labour rate ₹ 3.00 per hour
Factory overhead ₹ 2.50 per direct labour hour.
Selling and distribution overhead expenses ₹ 45,400
Material recovered at the end of operation will be ₹ 12,000 (estimated)
The company expects a net return of 15% on capital employed.
As a Management accountant of the Company, you are requested to prepare Cost and Price Statement, indicating the price to be quoted by the Company to the Customer. 8

(b) The Financial Profit and Loss of M/s. VGM Manufacturing company Ltd. for the year is ₹ 28,75,000. During the course of cost audit, it is noticed the followings:
(i) Some Old assets sold off which fetched a profit of ₹ 1,25,000
(ii) Interest was received amounting to ₹ 45,000 from outside the business investment.
(iii) Work-in-progress valuation for financial accounts does not as a practice take into account factory overhead. Factory overhead is ₹ 2,15,000 in opening W-I-P and ₹ 2,45,000 in closing W-I-P.
(iv) The Company was engaged in Trading activity by purchasing goods of ₹ 11,15,845 and selling at ₹ 13,12,850 after incurring ₹ 35,000 as expenditure.
(v) A major overhaul of machinery was carried out at a cost of ₹ 5,50,000 and next such overhaul will be dome only after five years.
(vi) Opening stock of Raw material and finished good was overvalued for ₹ 2,00,000 and closing stock was overvalued ₹ 1,85,000 in financial records.
Work out the profit as per Cost Accounts. 7

Answer:

1. (a)

Statement of Estimated Cost and Price Quotation

Product – Special type Machine parts
Quantity – 2,50,000 units

Particulars	₹	₹
Materials 40,000 kg at ₹ 3 per kg.	1,20,000	
Less: estimated scrap value	12,000	1,08,000
Labour – (12000 – 800) hours at ₹ 3 per hour	33,600	
(800 hours of Over Time hours at ₹ 6/-	4,800	38,400
Prime Cost		1,46,400
Add: Factory overhead (12000 hrs at ₹ 2.50)		30,000
Factory cost		1,76,400
Add: Selling and distribution overhead		45,400
Total cost		2,21,800
Add: Profit		26,674
Sales		2,48,474

Selling price per unit ₹ 0.9939

Notes:
Calculation of Sales
Let Sales be S
S = Total Cost + 15% of capital employed
S = 221800 + 15/100 x (95000 + 0.35 of S)
S = 221800 + 0.15(95000 + 035 S)
S = 221800 + 14250 + 0.05 S
S - 0.05S = 236050
0.95 S = 236050
S = 236050 / 0.95 = 248474
Working Capital requirement = 35% Sales = 0.35 x ₹ 2,48,474 = ₹ 86,966

(b)

Profit as per Financial Accounts		28,75,000
Add: 1 Difference in valuation of W-I-P	30,000	
2 Proportionate charge i.e. four-fifth for overhaul of machinery	4,40,000	4,70,000
Less: 1 Profit on sale of old assets not included in Cost A/cs	1,25,000	
2 Interest received from outside investment	45,000	
3 Trading profit not included in cost accounts	1,62,005	
4 Difference in Raw material and finished stock valuation	15,000	3,47,005
Profit as per Cost Accounts		2,997,995

2. (a) Following data is available Nelson Ltd. relating to cost of production of a product subject to Cost Audit. Prepare export Profitability statement to be included in the annexure to the cost of production of 23000 units.

Particulars	**₹**
Sales (Local) 15,000 units	**40,50,000**
Sales (Export) 8,000 units	**20,00,000**
Material consumed 120 tonnes at ₹ 240 per tonne	**28,800**
Imported components ₹ 175 per unit	**40,25,000**
Direct labour	**75,000**
Factory overhead	**48,000**
Administrative overhead	**42,000**

Freight & Packing (Local sales)	**4,65,000**
Packing for export	**3,60,000**
Handling at port	**1,20,000**
Opening Work in progress	**3,20,000**
Closing Work in progress	**2,80,000**

Additional information:
Export incentive of 12% on FOB is receivable.
Draw back on duty paid on raw materials and components available on export is ₹ 25,000. **8**

(b) For what purposes the Cost Auditor refers to financial records while conducting the Cost Audit of the Company. **7**

Answer:

2. (a) Please note that decimals have been considered up to two places for calculation purpose:

Statement of Cost of Production

	Total Cost (₹)	Per unit Cost (₹)
Production = 23,000 units		
Direct Materials (120 tons @ 240 per ton)	28,800	1.25
Imported Components (@ 175 per unit)	40,25,000	175.00
Direct labour	75,000	3.26
Prime Cost	41,28,800	179.51
Factory Overhead	48,000	2.09
Opening WIP	3,20,000	13.91
	4496800	195.51
Less: Closing WIP	2,80,000	12.17
Works Cost	42,16,800	183.34
Administrative Overhead	42,000	1.83
Cost of Production	42,58,800	185.17

Statement of Cost and profit on Export Sales

	Total Cost (₹)	Per unit Cost (₹)
Production = 8,000 units		
Cost of production	14,81,360	185.17
Export Packing	3,60,000	45.00
Handling at port	1,20,000	15.00
Cost of Sales……………………………………………………(A)	19,61,360	245.17
Export Sales realization	20,00,000	250.00
Export incentive @ 12% on FOB	2,40,000	30.00
Duty drawback on raw materials & components	25,000	3.13
Total Realisation ……………………………………………(B)	22,65,000	283.13
Profit on export……………………………………………..(B – A)	3,03,678	37.96

(b) A cost auditor is required to express an opinion as to whether the Company has maintained proper cost accounting records so as give a true and fair view of Cost of production, etc. in arriving at this opinion the cost auditor has to ascertain about multitude of information such as cost of raw materials consumed, cost of power, cost of stock, employees cost, provision of depreciation, royalty, abnormal cost scrap, fuel, etc. Annexure to cost audit report require detailed information in respect of financial position, capital employed, net worth, profit, net sales, operating profit, unit cost of power and fuel, total wages salaries etc. Therefore, it is obvious that cost audit cannot be done without reference to financial records.

Further the cost statements are to 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;

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. Material discrepancy between financial records and cost records will be highlighted in the reconciliation statement which would required 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

3. (a) How would you determine the cost of material consumed in production for captive consumption as per CAS 4? 5
(b) What do you understand by the term 'collection of overhead' as per CAS 3? 5
(c) How would you assign administrative overheads as per CAS 11? 5

Answer:

3. (a) material consumed shall include materials directly identified for production of goods such as:
(i) Indigenous materials
(ii) Imported materials
(iii) Bought out items
(iv) Self manufactured items
(v) Process materials and other items
Cost of material consumed shall consist of cost of material, duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement. Trade discount, rebates and other similar items will be deducted for determining the cost of materials. Cenvat credit, credit for countervailing customs duty. Sales Tax set off. VAT. Duty draw back and other similar duties subsequently recovered/ recoverable by the enterprise shall also be deducted.

(b) Collection of overheads means the pooling of indirect items of expenses from books of account and supportive/corroborative records in logical groups having regards to their nature and purpose. Overheads are collected on the basis of pre-planned groupings, called cost pools. Homogeneity of the cost components in respect of their behavior and character is to be considered in developing the cost pool. Variable and fixed overheads should be collected in separate cost pool under a cost centre. A great degree of homogeneity in the cost pools are to be maintained to make the apportionment of overheads more rational and scientific. A cost pool for maintenance expenses will help in apportioning them to different cost centres which use the maintenance service.

(c) Assignment of administrative overheads to the cost objects shall be based on either of the following two principles:
   (i) Cause and effect – Cause is the process or operation or activity and effect in the incurrence of cost.
   (ii) Benefits received – Overheads are to be apportioned to various cost objects in proportion to the Benefits received by them.

The cost of shared services should be assigned to user activities on the basis of actual usage. Where the resources by way of infrastructure are shared the cost should be assigned on a readiness to serve basis. General management cost should be assigned on rational basis.

4. (a) The following data were extracted from the departmental data of Cost centre where A and B were employed and performing the job X, Y and Z.

	Particulars	A	B
1.	**Basic wages**	**₹ 150**	**₹ 210**
2.	**Dearness allowances**	**80%**	**80%**
3.	**Contribution to Provident fund on Basic wages**	**10%**	**10%**
4.	**Contribution to E.S.I. on Basic wages**	**4%**	**4%**
5.	**Overtime**	**18 hours**	**Nil**

The normal working hours per month is 200 hours. Overtime is paid at double the rate of normal wages and dearness allowance. Employers contribution to Provident fund and E.S.I. are at equal the rate of employees contribution. The two workers are employed on jobs X, Y and Z in the following proportion:

Jobs	**X**	**Z**
Worker A	**30%**	**40%**
Worker B	**20%**	**50%**

Overtime was done by A for job Y.
From the above:
(1) Calculate the earnings of A and B of a month to show labour rate per hour.
(2) Allocate the labour cost to each job X, Y and Z. **3+4=7**

(b) How will you treat the following items in the Cost Accounting records? **2x4=8**
(i) Scrap and waste.
(ii) Packing cost for captive consumption.
(iii) Quality control cost.
(iv) Abnormal and non recurring cost.

Answer:

4. (a)
Calculation of overtime wages of A:

		₹
Basic wages		150.00
Dearness allowance	80% of 150	120.00
Total Wages		270.00
Wage rate per hour	270/200	1.35
Overtime wages	18 hrs × (1.35 × 2)	48.60

Computation of total earnings of A and B:

Particulars	A (₹)	B (₹)
Basic wages	150.00	210.00
Dearness Allowance (80% of Basic)	120.00	168.00
Overtime Wages	48.60	-
Gross wages earned	318.60	378.00
Less: P.F @ 10% of Basic	15.00	21.00
E.S.I. @ 4% of Basic	6.00	8.40
Net wages earned	297.60	348.60

Computation of labour cost per hour :

	A (₹)	B (₹)
Basic + Dearness Allowance	270.00	378.00
Add: Employers contribution to PF and ESI (@ 14% of basic)	21.00	29.40
	291.00	407.40
Labour rate per hour	1.455	2.037

Statement showing allocation of wages to job:

	Total (₹)	X (₹)	Y(₹)	Z(₹)
A's wages (3:3:4)	291.00	87.30	87.30	116.40
A's overtime wages	48.60	-	48.60	-
B's wages (2:3:5)	407.00	81.40	122.10	203.50
Total	746.60	168.70	258.00	319.50

(b) (i) **Treatment of Scrap and waste** – The production process may generate scrap or waste. Realized or realizable value of scrap or waste shall be credited to the cost of production. In case, scrap or waste does not have ready market and it is used for reprocessing, the scrap or waste value is taken at a rate of input cost depending upon the stage at which such scrap or waste is recycled. The expenses incurred for making the scrap suitable for reprocessing shall be deducted from value of scrap or waste.

(ii) **Treatment of Packing cost for captive consumption** – If product is transferred/despatched duly packed for captive consumption, then cost of such packing shall be included in the cost of production. Packing cost includes both primary cost and secondary cost of packing material required for transfer/despatch of the goods used for captive consumption.

(iii) **Treatment of quality control cost –** The quality control cost is the expenses incurred relating to quality control activities required for maintaining quality standard. These expenses shall include salaries & wages relating to employees engaged in quality control activity and other related expenses shall be included in the cost of production.

(iv) **Treatment of Abnormal and non recurring cost –** Abnormal and non-recurring cost arising due to unusual occurrence of events, such as heavy break down of plants, accident etc. restricting sales below normal level. Abnormal idle capacity, abnormal process loss, abnormal scrap and wastage, payments like Voluntary retirements, retrenchment etc constitute abnormal cost shall not form the part of cost of production.

5. (a) What information are likely to be provided in Filling Form 23D? 4

(b) (i) Under what condition a Cost Accounting Firm can be appointed as Cost Auditor?4

(ii) Can a Cost Accountant continuing as internal auditor / Concurrent auditor for a year can be appointed for Cost auditing for the same year? 2

(c) In a manufacturing shop, product P requires 2 man hours and Product Q requires 6 man hours. In a month of 26 working days of 8 hours a day 2000 unit of P and 1000 unit of Q were produced. The Company employs 60 workers in the shop and the budgeted man-hours are 1,08,000 for the year. You are required to workout capacity ratio, activity ratio and efficiency ratio. 5

Answer:

5. (a) Form 23 D is likely to be filed by a Cost Accountant for appointment of a Company as a Cost Auditor within 30 days of receiving the appointment letter. The following information are likely to be required for filing the Form 23D as follows:

(a) CIN Number of the Company
(b) Order Number and date
(c) SRN Number and date
(d) Registration Number or Membership Number of the Cost Auditor
(e) Address of the Cost Auditor
(f) E-Mail ID Number
(g) Date of the appointment letter
(h) Whether the appointment is made within time limit
(i) Whether the appointment has been accepted

(b) (i) Appointment of cost auditor under a firm's name will be subject to the following conditions:

- All the partners of the firm are full time cost accountants in practice within the meaning of the Cost and Works Accountants Act, 1959.
- The firm must have been constituted with the previous approval of Central Government or of the Central Council of ICMAI.

The Cost Audit Report shall be signed by any one of the partners of the firm responsible for conducting audit and on behalf of the firm. In any case the report should not be signed by merely offering the firm's name.

With the amendment of Regulation 108 of the ICWAI Regulations on 25.09.1993, a proprietary firm can be approved by the Council of the Institute and therefore can be appointed as Cost Auditor.

(ii) Since the Cost Auditor is required to comment on the scope and performance of internal audit he cannot be impartial if he himself was the internal auditor. He may be biased while reporting on the performance of internal auditor. Hence the cost auditor of a company cannot be its internal auditor.

A concurrent auditor may be viewed as a person holding an office of profit of the company, so he cannot be appointed as the cost auditor of the same company.

(c) Budgeted hours for the year = 108000 Hrs for the year
= 9000 for the month
Maximum possible hours = 26x8x60 workers = 12480 Hrs
Actual hours worked = Maximum possible hours worked = 12480 Hrs.

Standard hours produced

Product P = 2000 x 2 =	4,000 Hrs.
Product Q = 1000 x 6 =	6,000 Hrs.
	10,000 Hrs.

(i) Capacity ratio

Standard capacity usage ration = Budgeted/maximum possible hours x 100
= 9000/12480 x 100 = 72.12%

Actual capacity usage ratio = Actual hour worked/maximum possible hours
= 12480/12480 x 100 = 100.00%

(ii) Activity Ratio = Actual production in terms of Standards Hrs/Budgeted Hrs.
= 10000/9000x100 = 111.11%

(iii) Efficiency Ratio = Actual production in Standard Hour / Actual hours worked
= 10000/12480 x 100 = 80.13%

Section B (20 marks)
Answer any two questions.

10x2=20

6. (a) What is the role of Audit committee as per SEBI guideline? 5

(b) As a Cost auditor, draft an "audit programme" after being appointed for Cenvat Credit Audit. 5

Answer:

6. (a) Role of Audit committee as per SEBI Guide line

1. Oversight of the Company's financial reporting process and disclosure of correct financial information.
2. Recommending the appointment, removal and fixation of remuneration of the external auditor.
3. Reviewing the annual financial statement before submitting to the Board with particular reference to statutory compliance, related party transaction, major accounting entries which have impact on companies profitability and financial strength etc.
4. Review internal control system.
5. Review the adequacy of internal audit system, the internal audit report, corrective measures taken on the audit points etc, including fraud and malpractices.
6. To look into the reasons of substantial defaults in payments to the lenders and creditors.

(b) (1) The "Audit programme of Cenvat Audit should include the followings.
   - (i) Name of the auditees.
   - (ii) Address and location of Auditees.
   - (iii) Period of audit 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 the manufacturing process

(3) Review of Bill of materials.

(4) Review of statutory details
   - (i) Classification of input to out put
   - (ii) MSN Nomenclature etc.

(3) In put checking
   - (i) Raw Materials
   - (ii) Packing Materials.

(4) Batch record checking
(5) Yield Analysis-in put checking.
(6) Cenvat records
   (i) PLA register.
   (ii) Amount claimed and claimable against Raw materials and Capital goods
   (iii) Summary statement of Cenvat credit
   (iv) Vender invoice etc.
   Review and checking of the documents of notices/show cause/litigation matter in respect of Cenvat Audit.

7. (a) What do you understand by Corporate Services Audit? Mention the areas covered by such audit. 5

(b) XYZ Ltd., a manufacturing Company does not accept the recommendation for improvements made by Operational Auditor. Suggest the alternative way to tackle the management stand. 5

Answer:

7. (a) The primary responsibility of the business towards consumers is to make available the products of the right quality at the right time in right quantity at right place and right price. The consumer service audit critically examines and appraises management on the aspect of services. It is therefore an audit of public responsibility in relation to customers and a part of social audit. The audit is based on the philosophy that the role of business should be conducive to raising the quality of life through its contribution in terms of better quality and services.

Areas Converted by Consumer Service Audit:
The assessment of the following is covered in Consumer Service audit.

(A) Assessment of Product related policies and Practices
   (1) To assess the products manufactured to meet the needs of customers of different classes, different taste and different purchasing power.
   (2) Reasonability of price with quality variation and efficiency variation.
   (3) Reasonability to profit included in price fixation.
   (4) Detailed information about manufacturer, product, company profit etc
   (5) Provision of after sales service.
   (6) Adequacy of research for better provision of product.
   (7) To assess about the product use value, customer satisfaction etc.
   (8) To assess the standardization simplification and specialization.
   (9) To assess the policies and practices for distribution to different customers, fair and equitable.

(B) To assess the Customer relationship
   (1) Assessing the prompt and efficient handling of customer complains.
   (2) Proper responding of enquires of customers.
   (3) Levels and product contain adequate information regarding quality and characteristic of product.
   (4) To assess Companies co-operation attitude to association of customers.

(C) General consideration
   (1) Safety norms relating to product adequately laid down on the face of product.
   (2) Statement of Performance guarantee
   (3) Advantage to customers are duly laid down.
   (4) Technical data to be given in sales promotion.
   (5) To assess the warrantees are explicitly stated.
   (6) Fundamental aspect of serving responsibility to customer.

(7) Relaxation of policy norms in respect of products, if available.

(b) The reason for hostility of management is that while conducting the audit, the auditor may come across the irregularities and burden them for more work which may not be acceptable to management. In such a situation if the management does not cooperate in such audit, the very purpose of the audit will be defeated. Therefore the auditor may give his suggestion and recommendation to management for improvement the operation which will result in time and cost reduction and quality improvement which has come across by him. The participation of the management very much essential to help the auditor. In such approach the auditor discuss the ideas for improvement with the managers that have to implement and make them feel that they are a part of the recommendation made for improvement.

Soliciting the views of the operating personnel, the operational auditor to develop a friendly attitude to the operational staff and to look forward to their guidance in a more receptive fashion. Once the receptive participative method is adopted then the resistance for change become minimum, feeling of hostility disappear and gives a feeling of mutual trust. Team spirit developed. The auditors and the management together try to achieve the common goal.

The proposed recommendations are discussed with management and modifications as may be agreed upon are incorporated in the operational audit report. With this attitude of the auditor it becomes easy to implement the proposed suggestion as the attitude themselves takes initiative for implementing and the auditor need not have to force any change. Hence operational auditor of XYZ manufacturing unit should adopt above participative approach.

8. (a) What is productivity audit? Describe the areas covered, and ratios generally used to measure productivity efficiency of the resources deployed. 5

(b) You are the Management auditor of a large manufacturing Company suffering from working capital crisis. Which areas you will cover to overcome the crisis? 5

Answer:

8. (a) The Productivity audit is an analysis, monitoring and evaluating the productivity of the resources deployed by any organisation. It is generally done to get the information about the status of productivity in the organisation for the purpose determining the scale of efficiency and effectiveness of 'resource utilization'. In other words, the objective of productive audit is -:

1. To attain optimum result
2. To improve on the benchmarks

The areas covered by productive audit are-:

1. Productivity action.
2. Resource availability
3. Performance standard
4. Benefit allocation
5. Productivity policies
6. Equipment usage
7. Accounting reporting
8. Resource allocation.

The following ratios are generally used in measuring productive efficiency of the resources

1. Capital employed per unit of product.
2. Gross profit to capital employed.
3. Net profit to capital employed.
4. Debt enquiry ratio.
5. Net worth and long-term debts to gross fixed assets.
6. Net worth and long-term debts to net fixed assets.

7. Debts to fixed loans.
8. Debts to floating loans.
9. Current assets to current liabilities.
10. Net working capital.
11. Total inventory to capital employed.

(b) Adequate working capital is required for smooth operation of the company. To ensure smooth flow of working capital the following action plan may be chalked out by the Management auditor.

(a) Estimation of working capital:- The manager should prepare projected working capital statement based on the functional budgets such as sales, production, expenses, capital expenditure and the master Budget consisting of project profit and loss and balance sheet.

(b) Cash flow statement/Cash budget:- Month-wise cash flow statement showing inflow and outflow of cash head wise should be prepared to analyse major inflows and out flows affecting the entity. Any wasteful outflow can be traced and eliminated. Bank reconciliation statement to be prepared periodically so that outstanding can be traces and acted upon.

(c) Inventory/Stock management:- Raw material and Inventories should be properly classified to determine the level of stock material required. The method of valuation to be determined. To determine the time factor for receipt and consumption of material. This is required to assess the production schedule and to avoid wasteful expenditure on account of excess storage capacity and cost of storage of inventory. In no circumstances the production schedule to hamper .For this, the Economic Order Quantity procedure to be adopted for spending minimum cost of capital for maintaining the inventory. The system of inventory management needs to avoid wastes and scrap generated during storage and handling. Just in time philosophy may be adopted to reduce processing time, stock etc which will release the working capital.

(d) Credit Management:- The Company should lay down proper policy for evaluating customers, determine the credit period and offering discount for an early payment. An age wise analysis of debtors should also be prepared so as to avoid credit to defaulters and bad debt. Careful analysis of customers according to pattern of sales so as to exercise control over debit balances. The Company should through its purchase department endeavour to avail maximum credit period from creditors. These actions should increase the working capital.

(e) Funds flow Analysis:- The company should prepare a funds flow analysis, distinguishing between long term short term sources and application of funds. Long term funds should be utilised for long term purposes and short term funds should be utilised for short term purposes. Working capital should not be utilised for capital assets.

(f) Investment management:- The idle funds of the company should be utilised for in short term securities to earn from idle short term funds.

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

Section C (20 marks)
Answer any two questions.

10x2=20

9. A Special task force is engaged for reviewing the low profit for M/S Ramnagar Textile Mills Ltd. After the review the Task force gave the following report:
The Company has 1248 looms working two shifts per day. There are 26 sections of 48 looms each. Each section has 24 weavers and a jobber. Thus there are 1300 direct labourers other than indirect labourers. The production is 20 lakh metres per month and realised ₹ 10

per metre. The average wage is ₹ 1,200 per month and fixed cost amounts to ₹ 2,25,000 per month. The product cost is ₹ 6 per metre in addition to Direct wages. The working time is between 7 a.m. to 12 mid-night comprising two shifts with half an hour interval.

The following suggestions are to be considered:

(i) Labour productivity can be improved by changing lay out of the machines.

(ii) Given the availability of space with the proposed change, only 1008 looms can be reinstalled, with 48 looms in each section.

(iii) Technically a section of 48 looms can be run with 13 weavers, a helper and a jobber. In such situation the salary per head will increase by ₹ 200 per month. There will be some drop in production per loom. The company is not in favour of retrenchment of labour.

(iv) The Company can run a third shift between 12 mid-night to 7.00 a.m. with half an hour interval. However full salary is to be paid for six and half hour work.

(v) Only 20 lakh metres are sold at present at ₹ 10 per metre. Balance production are to be sold in export market at ₹ 8 per metre.

(vi) An initial stage, the Company can switch to 3 shifts working with 12 sections having 25 direct labour each and 9 sections having 15 direct labour each. The production in 3 shifts will be 25 lakh metres. Additional fixed cost will be ₹ 1 lakhs per month.

With the implications of the proposal for the company calculate profitability and advice to Company. (You may make suitable assumptions) **10**

Answer:

Statement of Profitability

Particulars	Present	Proposed
No. of Looms	1248	1008
No. of shifts	2	3
No. of sections	26	21
No. of sections (with 25 hands in each section @ ₹1,200 p.m.)	25	12
No of section (with 15 hands in each section @ ₹1,400 p.m.)		9
Total no. of Direct labours employed	1,300	1,305
Expected Production (Lakh metres)	20	25

Profit statement (per month) **(₹)**

Particulars	Present	Proposed
Sales revenue	20,000,000	24,000,000
Cost:		
Production cost (₹6 per metre)	12,000,000	15,000,000
Direct Wages	15,60,000	16,47,000
Fixed Cost	2,25,000	3,25,000
Total Cost	1,37,85,000	1,69,72,000
Profit per month	6,21,5000	7,02,8000
Increase in profit	8,13,000	
Therefore the proposal is accepted.		

Working Notes:
No. of Looms/ looms per section = 1008 /48 = 21 sections

No. of employees employed

Present = (25 persons × 26 sections × 2 shifts) = 1300 workers

Proposed= (25 person × 12 section × 3 shifts) + (15 person × 9 section × 3 shifts) = 1305 workers

Direct wages per month
Present = (1300 × 1200) = 15,60,000
Proposed= (25 ×12 × 3 × ₹1200) + (₹1400 × 15 × 3× 9) = 16,47,000

Sales revenue per month
Present= (20,00,000 × ₹10) = 20,000,000
Proposed = (20,00,000 × ₹10) + (5,00,000 × ₹8) = 24,000,000

10. Given below are abridged Balance Sheet and Profit and Loss Account of M/S Festive Cloth Mills Ltd.

(₹ In Lakhs)

Balance Sheet	2003-04	2002-03	2001-02
Share capital	345	345	345
Reserves and surplus	302	795	1140
Long term borrowing	687	380	160
Working capital Loan	1563	823	582
Sundry creditors	1258	900	775
Other Provisions	587	325	305
TOTAL	4742	3568	3307
Net Fixed Assets	1168	756	625
Investment	15	15	15
Current assets			
Inventory	1025	1013	947
Book debt	210	185	175
Loans and advances	2263	1558	1515
Cash and bank balances	61	41	30
TOTAL	4742	3568	3307

(₹ In Lakhs)

Profit and Loss Account	2003-04	2002-03	2001-02
Sales	5038	4315	4465
Other Income	428	325	347
TOTAL	5466	4640	4812
Raw material and stores spares	3675	3045	3262
Factory wages	275	232	206
Salaries	428	375	256
Power and fuel	812	628	710
Repair and maintenance			
Building	7	12	15
Plant and machinery	39	53	47
Vehicles	42	35	20
Depreciation			
Building	11	15	17
Plant and machinery	54	45	42
Vehicles	65	28	31
Interest	245	180	154
Other overhead excluding salaries and Depreciation			
Factory overhead	145	104	82
Administrative overhead	73	60	40
Selling and distribution overhead	88	83	80
Loss for the year	(493)	(255)	(150)
Total	5466	4640	4812
Sales for the year (kgs)	4950896	3836855	3725245

Banker to the company appointed you as a consultant to identify the factors which have contributed to the continuing losses. Prepare a short note highlighting the factors which have prima facie led the company to sickness. 10

Answer:

10.

Working notes:	2003-04	2002-03	2001-02
Sales-Quantity (Kg.)	4950896	3836855	3725245
Sales value ₹ in lakhs	5038	4315	4465
Average Sales realization per Kg.	102	112	120
Raw material stores & spare consumed (₹ in lakhs)	3675	3045	3262
Material as percent of a sales value (%)	72.9	70.5	73.1
Direct wages as percent of sales value (%)	5.5	5.4	4.6

Observation:

From the above figures it may be seen that the companies declining profit is not due to market condition as revealed by the following factors.

(a) The Sales price per kg has been marginally decreasing year to year.

(b) Material Cost has decreasing from year to year.

(c) The Company has been able to control direct labour cost effectively.

(d) The level of production has been maintained and improved over the years.

(e) Inventory and Book debt level have remained within the limit in spite of increase in sales activity.

On the other hand the following factors present negative impact on Profitability and Balance sheet of the Company.

	2003-04	2002-03	2001-02
Long term borrowing	687	380	160
Working capital loan	1563	823	582
Net Fixed assets	1168	756	625
Loans and advances	2263	1558	1515
Depreciation, repairs & maintenance of vehicles	107	63	51
Interest	245	180	154

The increase in long term borrowing is reflected in the increase of net assets. But the net assets have not been utilized in the activity of production. Therefore it may be construed that Long term borrowing utilized in the unproductive assets or personal assets.

Increase in working capital loan has been utilized in Inventory and Book debts and Loans and advances. Since the loan has been increased in alarming manner the interest has been increased. This reflects the weak financial management of the Company.

Conclusion:

(i) It appears that the unit has become sick due to diversion of funds by management to other activities or for personal expenditure.

(ii) The Net fixed assets have been increased there is no corresponding increase in Profit / Turnover.

11. Selected statistics of Sagar & Company Limited for two years, are given below:

(Amount in ₹ Lakh)

	31.03.2014	**31.03.2013**
Gross profit	**36%**	**$33^1/_3$%**
Stock turnover	**20 times**	**25 times**
Average Stock	**₹38,400**	**₹36,000**
Average Debtors	**₹87,500**	**₹1,68,750**
Income Tax rate	**50%**	**50%**
Net Income after tax as % of Sales	**6%**	**7%**
Maximum Credit period allowed to customers	**60 Days**	**60 Days**

You are required to:

(i) Prepare a statement of profits in comparative form for all the two years.

(ii) Evaluate the position of the company regarding profitability and liquidity on the basis of information supplied to you.

(iii) What additional information will you require to evaluate fully the position of the company on the liquidity fund? 10

Answer:

11. (i) Statement of Profit of Sagar & Company Limited for the Year ended 31.03.2014 & 31.03.2013

	31.03.2014 ₹	31.03.2013 ₹
Sales	12,00,000	13,50,000
Less: Cost of Goods Sold	7,68,000	9,00,000
Gross Profit	4,32,000	4,50,000
Less: Operating Expenses	2,88,000	2,61,000
Profit before taxes	1,44,000	1,89,000
Less: Taxes	72,000	94,500
Net Profit	72,000	94,500

(ii) The Profitability of the Company is consistently improving. Its liquidity position, judged terms of debtors and stock turnover ratios, can be said to be very satisfactory. The stock turnover ratio being as high as 20 times. The debtors turnover ratios are also very high.

For 31.03.2014 = ₹ 12,00,000 ÷ ₹ 87,500 = 13.7 times

For 31.03.2013 = ₹ 13,50,000 ÷ ₹1,68,750 = 8.0 times

(iii) The amount of current liabilities and current assets, other than debtors and stock, are required to evaluate fully the position of the company on the liquidity front.

Workings :

(1) Year 2014,

Cost of Goods Sold =Stock Turnover X Average Stock

= 20 X ₹ 38,400

= ₹ 7,68,000

Sales = ₹7,68,000 X 100/ 64

= ₹ 12,00,000

Net Income = 6% on ₹12,00,000

= ₹ 72,000

Therefore, Profit before tax ₹ 1,44,000

(2) Year 2013,

Cost of Goods Sold = Stock Turnover X Average Stock

= 25 X ₹ 36,000

= ₹ 9,00,000

Sales = ₹9,00,000 X 100/ 66%

= ₹ 13,50,000

Net Income = 7 % on ₹13,50,000

= ₹ 94,500

Therefore, profit before tax ₹ 1,89,000.