Paper-19 - COST AUDIT & MANAGEMENT AUDIT

Time allowed-3hrs **Full Marks: 100**

The figures in the margin on the right side indicate full marks.
The paper is divided in three sections.
From Section A answer any four questions (4x15=60 marks)
From Section B answer any two questions (2x10=20 marks)
From Section C answer any two questions (2x10=20 marks)

Working Notes should form part of the Answer.
"Wherever necessary, suitable assumptions should be made and indicated in answer by the candidates"

Section A
Answer any four Questions [4x15=60]

1.(a) What is the relevance of Cost Audit in India. **[9]**

Answer:

Relevance of Cost Audit in India:

(i) Liberalization and Globalization – The liberalization of the economy has increased the relevance of Cost Audit in India more than ever before. In the present competitive scenario of globalization; the Cost Audit Reports have assumed greater importance and significance as the only source of reliable and authentic feedback to the government and its various departments and agencies. It has become very important that the product and services are made more competitive by constantly improving efficiency by reducing vital input costs and reduction of wastage. This constant exercise has to be monitored by Cost Audit only.

(ii) For toning up efficiency and productivity – Cost Audit is a powerful tool to highlight areas of inefficiency and improving performance. As such the need for Cost Audit is more in the present scenario than before.

(iii) Antidumping – The Cost Record and Cost Audit Report will play a good source document for the Indian exporters to substantiate their fair approach against any allegation of dumping. Further, for imposing Anti-dumping duties on the import into India, the expertise of Cost Auditors and certification by them will be useful.

(iv) Transfer pricing issue – Cost Audit Report Rules, 2001 have been amended to take care of the issue of 'Transfer Pricing' in right perspective in judging its impact on business activities.

(v) Audit Committee – The formation of Audit Committee is a big leap in ensuring good corporate governance. Cost Auditor plays as key role in the Audit Committee meetings.

(vi) Major source of information for Direct & Indirect Tax authorities – An independently audited Cost Records and the resultant Cost Audit Report become a major source of information, which can be effectively used by both the Direct & Indirect Tax authorities.

(vii) Serves Central Excise authorities – The Cost Audit Report are used by Central Excise Authorities for verifying the claim of the companies relating to ex-factory prices of the excisable goods, especially in the case of Inter-unit transfer.

(viii) Fixation of Tariff by the Tariff commission – The Tariff Commission relies on the authenticity of the Cost Audit Reports for fixing the tariff of the products, covered under Cost Accounting Records Rules.

(ix) Other relevant roles – Cost Audit serves the interests of shareholders. It is also made use of by Income Tax Authorities. Further, the Banks and Financial Institution also find the report as useful. The Cost Audit Report is used as evidence by DGIR (Directorate General of Investigation and Registration) in pursuit of cases with the MRTP Commission.

(b) TNT Ltd. has received an enquiry for supply of 2,00,000 numbers of Special Type of Machine Parts. Capacity exists for manufacture of the machine parts, but a fixed investment of ₹80,000 and working capital to the extent of 25% of Sales Value will be required to undertake the job.

The costs estimated as follows:

Raw Materials - 20,000Kgs @ ₹2.50 per kg

Labour Hours- 9,000 of which 1,200 would be overtime hours payable at double the labour rate.

Labour Rate- ₹ 2 per hour.

Factory Overhead - ₹ 2 per direct labour hours.

Selling and Distribution Expenses - ₹ 23,000

Material recovered at the end of the operation will be ₹6,000 (estimated).

The Company expects a Net Return of 25% on Capital Employed.

You are Management Accountant of the Company. The Managing Director requests you to prepare a Cost and Price Statement indicating the price which should be quoted to the Customer. [6]

Answer:

Statement of Estimated Cost and Price Quotation

Product: Special Type Machine Parts. Quantity = 2,00,000 units.

	₹	₹
Materials (20000 Kgs. @ ₹2.50)	50,000	
Less: Estimated Scrap value	6,000	44,000
Labour-		
7,800 hrs. @ ₹2	15,600	
1,200 (OT) hrs. @ ₹4	4,800	20,400
Prime Costs		64,400
Add: Factory overhead (9000 hrs. @ ₹2)		18,000
Factory Cost		82,400
Add: Selling and Distribution Expenses		23,000
Total Cost		1,05,400
Add: Profit		28,360
Sales		1,33,760

Selling Price / unit = 1,33,760/2,00,000 = ₹ 0.67

Working Notes:

Calculation of Sales

Let Sales be S

S = Total Cost + 25 % of Capital Employed.

$S = 1,05,400 + 25/100 \times (80,000+S/4)$

$S = 1,05,400 + 20,000 + S/16$

$S - S/16 = 1,25,400$

$15S = 1,25,400 \times 16$

$15S = 20,06,400$

$S = 1,33,760$

Sales = ₹1,33,760

Profit = Sales – Cost = 1,33,760 – 1,05,400 = ₹ 28,360

Working Capital = 1/4th of Sales = 1,33,760 x 1/4 = ₹33,440.

2. (a) State the objectives of the Cost Audit and Assurance Standards Board. [5]

Answer:

The following are the objectives of the Cost Audit and Assurance Standards Board:

a. To identify areas in which Standards on Quality Control, Assignment Standards, Standards on Auditing and Standards on Related Services need to be developed.
b. To develop all the above standards so that they may be issued under the authority of the Council of the Institute.
c. To develop Guidance Notes on issues arising out of any Standard or on auditing issues pertaining to any specific industry or on generic issues so that they may be issued under the authority of the Council of the Institute.
d. To formulate and issue Technical Guides, Practice Manuals and other Papers under its own authority for guidance of Cost Accountants in the cases felt appropriate by the Board.
e. To review the existing Standards, Guidance Notes, Technical Guides, Practice Manuals and other Papers to assess their relevance in the changed conditions and to undertake their revision, if necessary.
f. To provide Interpretations or formulate General Clarifications, where necessary, on issues arising from the Standards.

(b) List the items to be included and to be excluded while measuring the employee cost as per CAS – 7. [5]

Answer:

The following items are to be **'included'** for the purpose of measuring employee cost:

- Any payment made to an employee either in cash or kind
- Gross payments including all allowances payable and includes all benefits
- Bonus, ex-gratia, sharing of surplus, remuneration payable to Managerial personnel including Executive Directors and other officers
- Any amount of amortization arising out of voluntary retirement, retrenchment, termination, etc
- Variance in employee payments/costs, due to normal reasons (if standard costing system is followed)
- Any perquisites provided to an employee by the employer

And, following items are to be **'excluded'** for the purpose of measuring employee cost:

- Remuneration paid to Non-Executive Director
- Cost of idle time [Hours spent as idle time x hourly rate]
- Variance in employee payments/costs, due to abnormal reasons (if standard costing system is followed)
- Any abnormal payment to an employee – which are material and quantifiable
- Penalties, damages paid to statutory authorities or third parties
- Recoveries from employees towards benefits provided – this should be adjusted/reduced from the employee cost
- Cost related to labour turnover – recruitment cost, training cost and etc
- Unamortized amount related to discontinued operations.

(c) How are Cost Accounting Standards different from Cost Accounting Records Rules? [5]

Answer:

Cost Accounting Standards (CAS) are a set of standards designed to achieve uniformity and consistency in cost accounting practices. These are prescribed by Cost Accounting Standard Board (CASB) set up by The Institute of Cost Accountants of India.

Cost Accounting Records Rules are applicable to all companies engaged in production, processing, manufacturing and mining activities as defined under Rules 2(j), 2(k), 2(l) or 2(o) respectively and where:

(a) the aggregate value of net worth as on the last date of the immediately preceding financial year exceeds five crores of rupees; or
(b) the aggregate value of the turnover made by the company from sale or supply of all products or activities during the immediately preceding financial year exceeds twenty crores of rupees; or
(c) the company's equity or debt securities are listed or are in the process of listing on any stock exchange, whether in India or outside India.

Any company meeting the above criteria would be required to maintain cost accounting records. These Rules are not applicable to a company which is a body corporate governed by a Special Act.

On other hand CAS will be equally applicable to the companies and all product manufacturers. Therefore many experts are of the opinion that prescription of Cost Accounting through CAS with appropriate compliance audit or disclosure norms may be much more effective and useful than through complicated Cost Accounting Record Rules. Moreover this will bring more numbers of companies under the ambit and will help Govt. to achieve its objectives.

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?

(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 filling 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) Following information is available for a textile manufacturing company under cost audit. The following are the process wise wastages on inputs in the year 2013-14.

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:

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.

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:-

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

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

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

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

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

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

$$WM_6 = \frac{WM_1 \text{ x Net Output}}{\text{Actual Input}} = \frac{1.3161 \text{ x } 75.98}{100} = 1.000$$

4. (a) What are the principles of measuring 'overheads' as per CAS 3? [6]

Answer:

Principles of measuring 'overheads' are as follows:

(i) Overheads representing procurement of resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited.

(ii) Overheads other than those referred to in (i) shall be determined on the basis of cost incurred in connection therewith.
(iii) For example, machinery spare fabricated internally or a repair job carried out internally will include cost incurred on material, employees and expenses.
(iv) Any abnormal cost where it is material and quantifiable shall not form part of the overheads.
(v) Finance costs incurred in connection with procured or self generated resources shall not form part of overheads.
(vi) Overheads shall not include imputed cost.
(vii) Overhead variances attributable to normal reasons shall be treated as part of overheads. Overhead variances attributable to abnormal reasons shall be excluded from overheads.
(viii) Any subsidy / Grant / Incentive or amount of similar nature received / receivable with respect to overheads shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.
(ix) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the overheads.
(x) ix) Credits / recoveries relating to the overheads, material and quantifiable, shall be deducted from the total overhead to arrive at the net overheads. Where the recovery exceeds the total overheads, the balance recovery shall be treated as other income.
(xi) Any change in the cost accounting principles applied for the measurement of the overheads shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an entity.

(b) Opening stock of raw materials (10,000 units) ₹1,80,000; Purchase of Raw Materials (35,000 units) ₹7,00,000; Closing Stock of Raw Materials 7,000 units; Freight Inward ₹1,00,000; Self-manufactured packing material for purchased raw materials only ₹60,000 (including share of administrative overheads related to marketing sales ₹8,000); Demurrage charges levied by transporter for delay in collection ₹11,000; Normal Loss due to shrinkage 1% of materials ; Abnormal Loss due to absorption of moisture before receipt of materials 100 units. [9]

Answer :

Computation of value of closing stock of raw materials [Average Cost Method]

	Particulars	**Quantity (Units)**	**Amount (₹)**
	Opening Stock of Raw Materials	10,000	1,80,000
Add	Purchase of raw materials	35,000	7,00,000
Add	Freight inwards		1,00,000
Add	Demurrage Charges levied by transporter for delay in collection		11,000
			9,91,000
Less	Abnormal Loss of raw materials (due to absorption of moisture before receipt of materials) = [(7,00,000 + 1,00,000 + 11000) x 100]/35,000	(100)	2,317
Less	Normal loss of materials due to shrinkage during transit	(350)	-----

	[1% of 35,000 units]		
Add	Cost of self-manufactured packing materials for purchased raw materials only (60,000 – 8,000)		52,000
	Cost of raw materials	**44,450**	**10,40,683**
Less:	Value of Closing Stock = Total Cost / (Total units – Units of Normal Loss) [10,40,683/(10,000+35,000 – 350)]x 7,000	(7,000)	1,63,153
	Cost of Raw Materials Consumed	**37,450**	**8,77,530**

Note:

(i) Units of normal loss adjusted in quantity only and not in cost, as it is an includible item

(ii) Cost of self-manufactured packing materials does not include any share of administrative overheads or finance cost or marketing overheads. Hence, marketing overheads excluded.

(iii) Abnormal loss of materials arised before the receipt of the raw materials, hence, valuation done on the basis of costs related to purchases only. Value of opening stock is not considered for arriving at the valuation of abnormal loss.

(iv) Demurrage charges paid to transporter is an includible item. Since this was paid to the transporter, hence considered before estimating the value of abnormal loss

5. (a) ASHLEEN SUGAR MILLS LTD., a sugar manufacturing company, located at Utter Pradesh has a boiler which is used for its own by-product, bagases as fuel. The steam generated is first used for generation of power and the exhaust steam is used in the process of sugar manufacture. The following details are extracted from the financial accounts and cost accounting records of ASHLEEN SUGAR MILLS LTD for the year ended March 31,2013:

Sugar produced	**28,70,000 Quintals**
Steam generated and consumed	**14,65,000 Tonnes**
Fuel (Bagases) consumed for production of steam	**6,85,000 Tonnes**
Cost of generation of steam including cost of water (other than fuel cost)	**₹ 6,45,30,000**
Steam used for generation of power	**6,20,000 Tonnes**
Power purchased from Electricity Board @ ₹ 5.40 per KWH	**52,70,000 KWH**
Power generated from Steam Turbine	**4,85,25,000 KWH**
Variable conversion cost of generation of power(excluding cost of steam)	**₹ 4,22,18,000**

Notes: (1) The Sale Value of bagasse if sold in the open market is ₹ 1,820 per Tonne.
(2) The exhaust steam (after generation of power) transferred to sugar manufacturing process is 82% of the cost of production of steam.

Required:

(i) Prepare two separate Cost Sheet for steam and power.
(ii) Compute the average Cost of Power. [(5+4)+3=12]

Answer:

(i) ASHLEEN SUGAR MILLS LTD
Cost Sheet …………………

Particulars	Computation	₹
Cost of Steam		
Cost of Fuel-Bagasse	6,85,000 Tonnes @ ₹ 1,820	124,67,00,000
Conversion Cost including Cost of Water		6,45,30,000
Total Cost		131,12,30,000
Steam Generated (Tonnes)		14,65,000
Gross Cost of Steam per Tonne	131,12,30,000 ÷ 14,65,000	₹ 895.04
Steam directly used for Sugar Production	1465000-620000) Tonnes X ₹ 895.04	₹ 75,63,08,800
Value of exhaust steam from Steam Turbine	[At 82% of cost = (620000×895.04×0.82)]	45,50,38,336
Total Cost of Steam used for Sugar Production		121,13,47,136
Average Cost of Steam per Tonne	(121,13,47,136 ÷ 14,65,000)	₹ 826.86
For disclosure in Power & fuel to the Cost Audit Report :		
Steam Consumption per Quintal of Sugar:	(14,65,000 ÷ 28,70,000)	0.51 Tonnes
Steam Cost per quintal of Sugar:	(121,13,47,136 ÷ 28,70,000)	₹ 422.07

Particulars	Computation	₹
Cost of Power		
Cost of high pressure steam sent to steam turbine	(620000 Tonnes × ₹ 895.04)	55,49,24,800
Conversion cost for generation of Power (excluding Cost of Steam)		4,22,18,000
		59,71,42,800
Less : Cost of exhaust steam transferred to sugar manufacture		45,50,38,336
Net Cost of Power Generated		₹ 14,21,04,464
Power generated from steam Turbine		4,85,25,000 KWH
Cost of Power Generated per KWH		₹ 2.93

(ii) Computation of average cost of power:

Quantity & Cost of Power	**KWH**	**₹**	**₹ / KWH**
(a) Own Generation	4,85,25,000	14,21,04,464	2.93
(b)Purchased (@ ₹ 5.40)	52,70,000	2,84,58,000	5.40
	5,37,95,000	17,05,62,464	3.17

Power consumed per quintal of sugar (5,37,95,000 ÷ 28,70,000)	18.74 KWH
Power cost per quintal of Sugar (18.74 x 3.17)	₹ 59.41

(b) Define:
(i) 'Installed Capacity'
(ii) 'Idle Capacity' **[2+1=3]**

Answer:

(i) 'Installed Capacity' is the maximum productive capacity according to the manufacturers' specification of machines / equipments. Installed capacity of the unit/plant is determined after taking into account imbalances in different machines/ equipments in the various departments / production cost centers in the unit / plant and number of working shifts.

(ii) 'Idle Capacity' is the difference between installed capacity and the actual capacity utilization when actual capacity utilization is less than installed capacity.

Section B

Answer any two Questions [2x10=20]

6. (a) Discuss the role of Audit Committee. **[8]**

Answer:

The role of the audit committee shall include the following:

i. Oversight of the company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.
ii. Recommending to the Board, the appointment, re-appointment and, if required, the replacement or removal of the statutory auditor and the fixation of audit fees.
iii. Approval of payment to statutory auditors for any other services rendered by the statutory auditors.
iv. Reviewing, with the management, the annual financial statements before submission to the board for approval, with particular reference to:

(a) Matters required to be included in the Director's Responsibility Statement to be included in the Board's report in terms of clause (2AA) of section 217 of the Companies Act, 1956
(b) Changes, if any, in accounting policies and practices and reasons for the same
(c) Major accounting entries involving estimates based on the exercise of judgment by management
(d) Significant adjustments made in the financial statements arising out of audit findings Management Audit in Different Functions
(e) Compliance with listing and other legal requirements relating to financial statements
(f) Disclosure of any related party transactions
(g) Qualifications in the draft audit report.

v. Reviewing, with the management, the quarterly financial statements before submission to the board for approval
vi. Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems.

vii. Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.

viii. Discussion with internal auditors any significant findings and follow up there on.

ix. Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the board.

x. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern.

xi. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of nonpayment of declared dividends) and creditors.

xii. To review the functioning of the Whistle Blower mechanism, in case the same is existing.

xiii. Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.

- The term "related party transactions" shall have the same meaning as contained in the Accounting Standard 18, Related Party Transactions, issued by The Institute of Chartered Accountants of India.
- If the company has set up an audit committee pursuant to provision of the Companies Act, the said audit committee shall have such additional functions/features as is contained in this clause.

(b) What are the rules regarding the meeting of Audit Committee? [2]

Answer:

The audit committee should meet at least four times in a year and not more than four months shall elapse between two meetings. The quorum shall be either two members or one third of the members of the audit committee whichever is greater, but there should be a minimum of two independent members present.

7. (a) Explain whether the following activities amount to professional misconduct on the part of a Cost Accountant: [2x2=4]

(i) CMA Mitra, a Cost Accountant in practice published a book and gave her personal as an author. These details also mentioned her professional experiences and her association as partner with MKR and Associates, a firm of Cost Accountants.

(ii) M/s. K. Bhatt & Associates, a firm of Cost Accountants in practice, develops a website "bhatt.com". The colour chosen for website was very bright yellow where the names of the partners of the firm along with their various professional attainments and the major clients were to be displayed on the website.

Answer:

(i) A Cost Accountant in practice shall be deemed to be guilty of professional misconduct, if he solicits clients or professional work either directly or indirectly, by circular, advertisement, personal communication or interview or by any other means.
CMA, Mitra being a Cost Accountant in practice has committed a professional misconduct by mentioning that at present she is a partner of M/s MKR & Associates, a firm of Cost Accountants (Clause 6 of part I of First Schedule to the Cost and Works Accountants Act, 1959)

(ii) The Council of the Institute of Cost Accountants of India had approved posting of particular on website by Cost Accountants in practice under clause (6) of Part-I of First Schedule to the Cost and Works Accountants Act, 1959 subject to the prescribed guidelines. The relevant guidelines are:
• No restriction on the colours used in the website.
• Names of clients and fees charged not to be given.

Clause (7) of Part-I of First Schedule to the Cost and Works Accountants Act, 1959 prohibits a member not to advertise his professional attainments or services other than Cost Accountant on professional documents, visiting cards, letter heads or sign boards.
In view of the above, M/s K. Bhatt & Associates would have no restriction on the colours used in the website but failed to satisfy other guidelines.
Thus M/s K.Bhatt & Associates would be held guilty of professional misconduct under clause (6) and clause (7) of Part-I of First Schedule to the Cost and Works Accountants Act,1959.

(b) A nationalized bank which has extended cash credit to a manufacturing company on the security of the inventory holding, is periodically receiving stock statements from the company indicating the value of stocks held. The company is sick and the Bank wants to reassure itself that its loans are fully covered by stocks. You have been appointed by the Bank to certify the value of the inventory. How would you proceed to conduct the 'inventory audit?' [6]

Answer:

Inventory Audit involves the following aspects:
(i) Physical verification of stocks.
(ii) Method of valuation adopted.
(iii) Currency of stocks (i.e., movement)

(i) **Physical verification of stocks—**Physical verification of stocks will normally be 100 percent. However, depending upon the nature of items and material flows, it may be done by sampling. This will require proper sampling procedures to ensure the samples verified represent the characteristics of entire stock. An ABC categorization may be done so that right emphasis is given to each item of stock.
(ii) **Method of valuation adopted—** The main thrust of inventory audit is to check the accuracy of the costs, to verify the market rates and to see that the values adopted for stock valuation are cost price or net realisable value whichever is lower. Basis of valuation adopted for Raw Materials, Work-in process, Finished Goods and Spares and Consumables must be examined and reasonableness verified to ensure the realizable values. For imported items foreign exchange translation rate for conversion will be:
 (a) as per bank debits under LC, or
 (b) rate prevalent as evidenced by Bill of Entry(or Forward Rate if Forward Contract has been taken (for imports on D.A. terms or on account).
(iii) **Currency of stocks—** Currency of stocks will be ensured by analyzing all items by fast, slow and non-moving characteristics. In respect of slow and non-moving items, fall in value, if any, due to obsolescence, deterioration etc. will also have to be examined and reported.

 In respect of spare parts, care must be taken to segregate items of spares relating to scrapped or replaced plant/machinery, as these may not have any value.

In finished goods also, returns from customers for defects in quality must be given special consideration in valuation.

(iv) The basis of the unit rates adopted must be consistent and include:

(a) Freight, insurance, octroi, packing, loading and unloading and other incidental charges incurred.

(b) Manufacturing costs upto stages of completion in case of finished product.

The report may be designed by the bank or designed by the Cost Auditor. In any case some items which need to be highlighted should be shown separately. The report should contain lacuna, if any, improvements required, and suggestions for improvement. Needless to say the report should not only be useful to client, i.e bank but also to the unit whose audit is carried out to enable them to improve their performance.

8. Prepare a checklist/questionnaire for management audit of the purchase function of a manufacturing company which has factories at different locations manufacturing the same range of products. [10]

Answer:

A central purchase organization which caters to the needs of several factories manufacturing the same range of products, should aim at economies of scale, as it is in a better bargaining position. At the same time, it should keep in mind the logistics aspects, i.e. cost of transporting the raw materials and components from a single source to different (may be far-flung) locations. The objective should be to ensure a more or less uniform delivered cost at each location. Where the transportation cost is significant, the buyer should try to source the components from a supplier who is the nearest to the point of consumption.

Apart from the above special features, the auditor of purchase function should look into the following major points:

(i) Organisation of purchase function, with special reference to the authorities who have been delegated powers for the following:

- Make purchase requisitions or authorize them
- Decide the vendors to whom enquiries should be sent
- Certifying the technical competence and production capacity of the vendors.
- Final selection of the vendor

(ii) What is the machinery for the technical appraisal of the vendor's capacity and capability?

(iii) Is there a regular vendor rating procedure and continuous monitoring of the performance of vendors?

(iv) What is the procedure for issue of enquiries, preparing comparative statements and selection of supplier?

(v) Effectiveness of the market intelligence setup i.e., collection of data regarding various sources, building up a data base of products/suppliers/prices/technical specifications.

(vi) Is there a separate setup for follow up of supplies and taking corrective action in case of delays?

(vii) Are the terms of delivery standardized, or whether the purchase department is responsible for collection of stores from the vendors in some cases and the vendor responsible for delivery in some others? If the purchase department is responsible for collection, who is responsible for fixing transport charges?

(viii) Is there close liaison between quality control (inward goods) and purchase department, so that quality complaints are brought to the notice of purchase department promptly?

(ix) What are the built-in controls against misuse of purchasing powers?

(x) What is the quantum of emergency purchases in relation to total purchases? Are the reasons for emergency purchases analysed? - i.e. whether on account of vendor failure, or sudden change in production plans etc.

(xi) Who certifies the payment of bills? Is the purchase department involved in deciding priorities for payment?

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

9. M Ltd has the following Balance Sheets as on 31 March 2013 and 31 March 2012:

Particulars	₹ in lakhs	
	31 March 2013	31 March 2012
Sources of Funds:		
Shareholder's Fund	**4,954**	**3,144**
Loan Funds	**7,340**	**6,366**
	12,294	**9,510**
Applications of Funds:		
Fixed Assets	**7,132**	**6,000**
Cash & Bank	**1,178**	**1,140**
Debtors	**3,190**	**2,536**
Stock	**5,934**	**5,014**
Other Current Assets	**3,334**	**3,008**
Less: Current Liabilities	**(8,074)**	**(7,788)**
	12,694	**9,910**

The Income Statement of the M Ltd for the year that ended is as follows:

	₹ in lakhs	
	31 March 2013	31 March 2012
Sales	44,530	27,964
Less: CGS	41,920	25,288
GP	2,610	2,676
Less: Selling, General & Administrative Expenses	2,070	1,304
Earnings before Interest and Tax (EBIT)	540	1,372
Less: Interest Expense	226	210
Profit before tax	314	1,162
Less: Tax	46	384
Profit after Tax	268	778

Required:

(i) Calculate for the year 2012-13:

a. **Inventory Turnover Ratio**
b. **Return on Net worth**
c. **ROI**
d. **ROE**
e. **Profitability ratio**

(ii) Give a brief comment on the financial position of M Ltd. [1+1+1+2+2+3=10]

Answer:

(i)

a . Inventory Turnover Ratio (for the year 2012-13) = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \frac{41,920}{5,474} = 7.66$

b. Return on Net Worth (for the year 2012-13)= $\frac{\text{Profit after tax}}{\text{Net Worth}} = \frac{268}{4,954} \text{x} 100 = 5.41\%$

Net Worth = Shareholder's Fund

c. ROI (for the year 2012-13) = $\frac{\text{Net Profit before Interest but after tax}}{\text{Average Capital Employed}} \text{x}100$

$= \frac{494}{11,302} \text{x}100 = 4.37\%$

Net Profit before interest but after tax = 268 + 226 = 494

Average Capital Employed = Average of Opening and closing of Net Current Assets/2

= (12,694+ 9,910)/2 = 11,302

d. ROE (for the year 2012-13) = $\frac{\text{Net Profit available to Equity Shareholders}}{\text{Average Equity Shareholders' Fund}} \text{x}100$

$= \frac{268}{(4,954 + 3,144)/2} \text{x}100 = 6.62\%$

e. Profitability ratio (for the year 2012-13) –

(i) Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Sales}} \text{x}100 = \frac{2,610}{44,530} \text{x}100 = 5.86\%$

(ii) Operating Profit Ratio = $\frac{\text{Operating Profit}}{\text{Sales}} \text{x}100 = \frac{314 + 226}{44,530} \text{x}100 = 1.21\%$

(iii) Net Profit Ration = $\frac{\text{Profit before tax}}{\text{Sales}} \text{x}100 = \frac{314}{44,530} \text{x}100 = 0.71\%$

(ii) Profitability of operation of the company remarkably decline from ₹1,372 (₹ in Lakh) to ₹540 (₹ in Lakhs), due to a huge increase in the operating expenses during the year 2012-13. NP of the company also reduces due to an increase in the interest expenses. During the year 2012-13, both Fixed operating expenses as well as fixed financial expense have increased, as a consequence of which the NP of the company radically reduced. During 2012-13, both operating and Financial Leverages have become adverse, as a result of which the company has been crucially suffering from a liquidity crisis during the year 2012-13.

10. (a) Manufacture's specification capacity for a machine per hour = 1500 units
No. of shifts (each shift of 8 hours each) = 3 shifts
Paid holidays in a year (365 days):

Sundays	**52 days**
Other holidays	**8**

Annual maintenance is done during the 8 other holidays.
Preventive weekly maintenance is carried on during Sundays.
Normal idle capacity due to lunch time, shift change etc =1hour.

Production during last five years = 76.20, 88, 65.82, 78.5, 76.6 lakhs units
Actual production during the year = 76.40 lakhs units.
Calculate Installed capacity, Available capacity, Actual capacity, Idle capacity and Abnormal idle capacity as per CAS 2 from the data given. [6]

Answer:

Installed capacity for the machine	= 365 x 8 x 3 x 1500
	= 131.40 lakhs units
Available capacity	= (365 – 52 - 8) x (8 -1) x 3 x 1500
	= 305 x 7 x 3 x 1500
	= 96.08 lakhs units
Normal capacity	= (76.2 + 78.5 + 76.6)/3
	= 77.1 lakhs units.
Actual capacity utilization	= 76.4 lakhs units
	= 76.4/131.4 x 100
	= 58.14%
Idle capacity	= (131.40 - 76.4) lakhs units
	= 55 lakhs units
	= 55 /131.4 x 100
	= 41.86%
Abnormal idle capacity	= (77.1 - 76.4) lakhs units
	= 0.70 lakhs units

(b) A chemical manufacturing unit uses ingredient A as the basic material. The cost of the material is ₹ 40 per kg and the Input-Output ratio is 120%. Due to a sudden shortage in the market the material becomes non-available and the unit is considering the use of one of the following substitutes available:

Materials	Input - Output Ratio	₹/ per Kg
B	135%	52
C	115%	60

You are required to recommend which of the above substitutes is to be used. [4]

Answer:

Cost of Raw Material = $\frac{\text{Input}}{\text{Output}}$ x Rate per Unit

Cost of Material of: (Per Kg)

$$A = \frac{120}{100} \times 40 = ₹48.00$$

$$B = \frac{135}{100} \times 52 = ₹70.20$$

$$C = \frac{115}{100} \times 60 = ₹69.00$$

Material C is cheaper to be used in the final product. It is cheaper than B by ₹1.20 (₹70.20 - ₹69.00)

11. Jain Textiles Ltd. has been having low profits. A special task force appointed for reviewing performance and prospects has the following to report:
The company has 1,200 looms working 2 shifts per day. There are 25 sections of 48 looms each. Each section has 24 weavers and a jobber. Thus there are 1,250 direct labourers, other than indirect labourers and service hands. The working time is between 7 a.m. and 12 mid-night, comprising 2 shifts of 8 hours each, with half hour interval between shifts. The production is 18 lakh metres per month and the realization is ₹3 per metre. The average wage of the direct labourer is ₹800 per month and the fixed costs amount to ₹1,75,000 per month. The product cost is ₹2.25 per metre in addition to direct wages.
The following suggestions are to be considered:

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

(ii) Given the space available, with the proposed change in layout, only 1,008 looms can be re-installed, with 48 looms in each section.

(iii) Technically, a section of 48 looms can be run with 12 weavers, a helper and a jobber. It will be necessary to increase the age of direct labour, for such sections, by ₹110 per head per month. There will be some drop in production per loom. The company is not for retrenchment of labour.

(iv) The company can run a third shift between 12 mid-night and 7 a.m., with a half hour interval. However, for the six and half hours' work, eight hours' wage will have to be paid.

(v) Only 18 lakh metres can be sold at the present price of ₹3 per metre. There is an export offer for ₹4.5 lakh metres at ₹2.70 per metre.

(vi) As an initial step, the company can switch to 3 shift working, with 12 sections having 25 direct labourers each and 9 sections having 14 direct labourers each. Progressive conversion to 14 hands per section, for all sections, can be planned, as direct labourers retire or voluntarily leave the job. The production with three shift working will be 22.5 lakh metres. Additions to fixed costs will amount to ₹50,000 per month.

Examine the implications of the proposals for the company's profits and give your advice. [3+3+4=10]

Answer:

Statement of Profitability

Particulars	Present	Proposed
No. of Looms	1,200	1,008
No. of shifts	2	3
No. of sections	25	21*
No. of sections (with 25 hands in each section @ ₹800 p.m.)	25	12
No. of sections (with 14 hands in each section @ ₹910 per head p.m.)	-	9

Total number of direct labourers employed	1,250	1,278
Expected production (lakh metres p.m.)	18	22.5

(*1008/48)

Profit Statement (per month) (₹)

Particulars		Present	Proposed
Sales Revenue	(a)	54,00,000	66,15,000
Costs:			
Production Cost (@ ₹2.25)		40,50,000	50,62,500
Direct Wages		10,00,000	10,63,980
Fixed Costs		1,75,000	2,25,000
Total Costs	(b)	52,25,000	63,51,480
Profit	(a) – (b)	1,75,000	2,63,520

With the proposed plan of action the profit of the company has increased by ₹88,520 (₹2,63,520 - ₹1,75,000). Hence, the proposal is recommended for implementation.

Working Notes:

1. No. of Sections = No. of Looms/Looms per section = 1,008 looms/48 looms = 21 sections.
2. No. of labourers employed
   No. at present (25 persons x 25 sections x 2 shifts) = 1250 persons
   Proposed [(25 x 12 x 3) + (14 x 9 x 3)] = 1278 persons
3. Direct Wages (per month)
   Present (1,250 x ₹800) = ₹10,00,000
   Proposed [(900 x ₹800) + (378 x ₹910)] = ₹10,63,980
4. Sales revenue per month
   Present (18,00,000 x ₹3) = ₹54,00,000

   Proposed [(18,00,000x ₹3) + (4,50,000 x ₹2.70)] = ₹66,15,000