Paper 19 - COST AUDIT & MANAGEMENT AUDIT

Full Marks: 100

Section A

Answer any four questions [4x15=60]

1. (a) The financial profit and loss account for the year 2012-13 of a company shows a net profit of ₹26,28,000. During the course of cost audit, it was noticed that:

(i) The company was engaged in trading activity by purchasing goods at ₹4,00,000 and selling it for ₹5,00,000 after incurring and expenditure of ₹25,000.

(ii) Some old assets sold off at the end-end fetching a profit of ₹80,000

(iii) A major overhaul of machinery was carried out at a cost of ₹4,00,000. And the next such overhaul will be done only after four years.

(iv) Interest was received amounting to ₹1,50,000 from outside investments.

(v) Work-in-progress valuation for financial accounts does not as a practice take into account factory overhead. Factory overhead was ₹1,85,000 in opening WIP and ₹3,15,000 in closing WIP.

Work out the profit as per Cost Accounts and briefly explain the adjustment, if any, carried out. **[7]**

Answer:

Reconciliation Statement

	₹	₹
Profit as per Cost Accounts		27,53,000
Less: 1. Proportionate Charge i.e., three-fourth for overhaul of machinery not provided in cost accounts	3,00,000	
2. Difference in the valuation of work-in-progress	1,30,000	4,30,000
Add: 1. Trading profit not included in cost accounts	75,000	
2. Profit on sale of old assets	80,000	
3. Interest received on outside investment	1,50,000	3,05,000
Profit as per Financial Profit & Loss Account		26,28,000

(b) The Companies (Cost Accounting Records) Rules 2011 have not prescribed any specific formats for the cost statements. In what manner and format would the cost statements be kept under these Rules? (Taken from FAQ 1) **[4]**

Answer:

As per sub rule (2) of Rule 4, the companies are required to maintain cost records on regular basis in such manner so as to make it possible to calculate per unit cost of production or cost of operations, cost of sales and margin for each of its products and activities for every financial year on monthly/quarterly/half-yearly/annual basis. The cost statements are to be prepared for every unit and every product produced, processed, manufactured or mined.

As per sub rule (3), the cost records are to be maintained in accordance with the generally accepted cost accounting principles and cost accounting standards issued by the Institute, to the extent these are found to be relevant and applicable.

These Rules have not prescribed any specific formats for the cost statement. A guidance note on the subject is under preparation by the Institute of Cost Accountants of India (ICAI), inter alia, containing model formats for cost records, statements, schedules etc.

(c) What does turnover mean under these Rules? Is gross turnover Inclusive of excise duty? (Taken from FAQ 4) [4]

Answer:

As per Rule 2(p), "Turnover" means gross turnover made by the company from the sale or supply of all products or services during the financial year. It includes any turnover from job work or loan license operations but does not include any non-operational income.

The term "Turnover" defined in the Companies (Cost Accounting Records) Rules, 2011 shall exclude taxes & duties. It shall have the same meaning, wherever it appears, in all other orders/rules issued in connection with the cost accounting records and cost audit.

2. (a) Explain the ceiling on number of Cost Audits. [8]

Answer:

Ceiling on Number of Cost Audits
The sub-Section (2) of Section 233B inter-alia provides that before the appointment of any auditor is made by the Board, a written certificate shall be obtained by the Board from the auditor proposed to be so appointed to the effect that the appointment, if made, will be in accordance with the provisions of sub-Section (1B) of Section 224.

Section 224(1)(B) provides that no company or its Board of directors shall appoint or re-appoint any person who is in full time employment elsewhere or firm as its auditor if such person or firm is, at the date of such appointment or re-appointment, holding appointment as auditor of the specified number of companies or more than the specified number of companies. The proviso to Section 224(1B) further provides that the provisions of this sub-Section shall not apply, on and after the commencement of the Companies (Amendment) Act, 2000, to a private company.

Explanation I to the Section 224 provides that for the purposes of sub-Sections (1B) and (1C), "specified numbers" means:

(i) in case of a person or firm holding appointment as auditor of a number of companies each of which has a paid-up share capital of less than rupees twenty-five lakhs, twenty such companies;

(ii) in any other case, twenty companies, out of which not more than ten shall be companies each of which has a paid-up share capital of rupees twenty-five lakhs or more.

Explanation II to the Section 224 provides that in computing the specified number, the number of companies in respect of which or any part of which any person or firm has been appointed as an auditor, whether singly or in combination with any other person or firm shall be taken into account.

In view of aforesaid provisions, the ceilings on the number of cost audits can be clarified as under:

(i) In the case of firm of cost accountants: Twenty companies for each such partner of the firm who is not in full time employment. However, not more than ten such companies should have a paid up share capital of ₹25 lakhs or more;

(ii) In the case of an individual cost accountant, who is not in full time employment: Twenty companies, out of which not more than ten should have a paid-up share capital of ₹25 lakhs or more.

It can be seen from above that Section 224(1B) and Explanation I to Section 224 refers to the ceilings for the number of companies and not to the number of cost audit orders or products. Therefore, if more than one products of a particular company are covered under cost audit for the same year, a cost auditor should count their number as one company only, since the audits for all the products relate to the same company despite the fact that separate cost audit orders have been issued with respect to each such product. Similarly, if that company appoints different cost auditors for different products, each auditor shall count the company as one company for counting their individual quota for number of audits.

It should be noted that the Companies (Amendment) Act, 2000 has inserted a provision (Explanation II) to Section 224, whereby the provisions of sub-section 1-B shall not apply to a Private Company.

It means that for computing the limit on number of companies for audit, Private Companies should not be counted.

(b) What are the duties of Cost Auditors? [7]

Answer:

Duties of the Cost Auditor
The duties of the cost auditor are also similar to those of the (financial) auditor of the company has under sub-Section (1) of Section 227 (Section 223B(4)).The duties of the cost auditor *inter-alia* include:

(i) To ensure that the proper books of accounts as required by Cost Accounting Records Rules have been kept by the company so far as it appears from the examination of those books and proper returns for the purpose of his audit have been received from branches not visited by him;

(ii) To ensure that the Cost Audit Report and the detailed cost statements are in the form prescribed by the Cost Audit Report Rules by following sound professional practices i.e. the report should be based on verified data and observations may be framed after the company has been afforded an opportunity to comment on them;

(iii) The underline assumptions and basis for allocation and absorption of indirect expenses are reasonable and are as per the established accounting principles;

(iv) If the auditor is not satisfied in any of the aforesaid matters, he may give a qualified report along with the reasons for the same;

(v) Sending the Report to the Cost Audit Branch within 180 days from the end of the financial year with one copy to the company;

(vi) Sending his replies to any clarification, that may be sought by the Cost Audit Branch on his report. Sending such replies within 30 days from the date of receipt of communication calling for such clarification.

3. (a) A Factory manufactures only one product in one quality and size. Its owner states that he has a sound system of financial accounting which can provide him with unit cost information

and as such he does not need a cost accounting system. State your arguments to convince him the need to introduce a cost accounting system. [8]

Answer:

The primary advantages of a Cost Accounting System are -

(i) Profit Measurement and Analysis: Costs should be accurately ascertained and matched with revenues to measure profits of a Firm. Further, Cost Accounting is useful for identifying the exact causes for decrease or increase in the profit / loss of the business.

(ii) Cost Reduction: The application of cost reduction techniques like Value Analysis, Value Engineering and Operations Research techniques helps in achieving economy in operations. Continuous efforts are taken by the Firm, to find new and improved methods for reducing costs.

(iii) Cost Comparison and Cost Control: Cost comparison helps in cost control. Such a comparison may be made from period to period by using the figures in respect of the same Firm or of several units in an industry by employing uniform costing and inter-firm comparison methods.

(iv) Identification of losses and inefficiencies: A good Cost Accounting System helps in identifying unprofitable activities, losses or inefficiencies in any form, so that appropriate actions are taken. The use of Standard Costing and Variance Analysis techniques points out the deviations from pre-determined level and thus demands suitable action to eliminate its recurrence. Also, the cost of idle capacity can be easily worked out, when a concern is not working to full capacity.

(v) Price Determination: Cost Accounting is very useful for price fixation. It serves as guide to test the adequacy of selling prices. The price determined is used for preparing estimates or submitting tenders.

(vi) Financial Decision-Making: Managers can obtain relevant Information from the Cost Accounting System, that help in making decisions involving financial considerations, viz. whether to purchase or manufacture a given component whether to accept orders below cost, which machine to purchase when a number of choices are available, etc.

(vii) Dispute and Issue-solving: A good cost accounting system provides cost figures for the use of Government, Wage Tribunals and other bodies for dealing and solving issues like price fixation, price control, tariff protection, wage level fixation, etc.

(b) List the essential features of a good Cost Accounting system. [7]

Answer:

To be successful, a good Cost Accounting System should possess the following essential features –

i. Simple and easy to operate: The system should be tailor-made, practical, simple and capable of meeting the requirements of a business concern.

ii. Accuracy of data: The data to be used by the Cost Accounting System should be accurate. Otherwise it may distort the output of the system.

iii. Relevance of data: The system should handle and report relevant data for use of managers for decision making. It should not sacrifice its utility by introducing meticulous and unnecessary details.

iv. Management's Role: The top Management should have a faith in the Costing System and should also provide a helping hand for its development and success.

v. Participative Role of Executives: Necessary co-operation and participation of executives from various departments of the concern is essential for developing a good system of Cost Accounting.
vi. Cost-effective: The cost of installing and operating the system should justify the results. The benefits from the system should exceed' the amount to be spent on it.
vii. Smooth implementation: The system should be effectively implemented. A carefully phased programme should be prepared by using network analysis for the introduction of the system.

4. (a) The Total Overhead Expenses of a factory are ₹4,46,380. Taking into account the normal working of the factory, Overhead was recovered in production at ₹1.25 per hour. The actual hours worked were 2,93,104. How would you proceed to close the books of accounts, assuming that besides 7,800 units produced to which 7,000 were sold, there were 200 equivalent units in WIP?

On investigation, it was found that 50% of the Unabsorbed Overhead was on account of increase in the cost of indirect Materials and Indirect Labour and the remaining 50% was due to factory inefficiency. Also give the profit implication of the method suggested. [10]

Answer:

i. Difference in Absorption = Absorbed OH (-) Actual OH
= (₹1.25 per hour x 2,93,104 hours) – ₹4,46,380 = ₹80,000 (under absorption)

Normal Increase in OH Costs 50% = ₹40,000

Treated as Cost and apportioned to -

Units Sold (7,000 units) = ₹35,000
Closing Stock of Finished Goods (800 units) = ₹4,000
Closing Stock of WIP 200 units (equivalent Units) = ₹1,000

So, Supplementary OH Recovery Rate = ₹5 per unit.

Abnormal Items	₹
Factory In-efficiency	40,000

Treated as LOSS and debited to Costing P&L

Notes:

- Supplementary OH Recovery Rate = $\frac{\text{Total OH}}{\text{Total Output Qty.}} = \frac{₹\ 40,000}{8,000\ \text{Units}}$ = ₹5 per unit.

This calculation can be based on either Units Sold, (or) Closing Stock of FG, (or) Closing Stock of WIP, (or) Total of all these.

ii. Journal Entries (₹)

Transaction/Narration	Particulars	Dr.	Cr.

1. Production OH incurred	Production OH Control A/c Dr. To General Ledger Adjustment A/c.	4,46,380	 4,46,380
2. Production OH absorbed (₹1.25 per hour x 2,93,104 days)	WIP Control A/c Dr. To Production OH Control A/c.	3,66,380	 3,66,380
3. Treatment of Under absorption	Cost of Sales A/c Dr. Finished Goods Control A/c Dr. WIP Control A/c Dr. Costing P&L A/c Dr. To Factory OH Control A/c	35,000 4,000 1,000 40,000	 80,000

iii. Impact on Profit

- OH absorbed into production is only ₹3,66,380 whereas OH actually incurred is ₹4,46,380. Hence, before passing the Journal Entry for under absorption, profit would have been wrongly over-stated (due to under-absorption / under-statement of costs) by ₹80,000.
- The above wrong over statement of profits is rectified by the Under absorption entry, in the following manner –

Under absorption Amount, (i.e., Profit over-statement amount) = ₹80,000				
Transfer to	Cost of Sales A/c	FG Control A/c	WIP Control A/c	Costing P&L A/c
Amount Transfer	₹35,000	₹4,000	₹1,000	₹40,000
Treatment	Finally transferred to Costing P&L A/c	Included in Value of Closing Stock of FG	Included in Value of Closing Stock of WIP	Transferred to Costing P&L A/c
	Profits of current period will be reduced by ₹35,000	Profit of next period will be reduced by ₹5,000, since Opening Stock will be valued at higher amount.		Profits of current period will be reduced by ₹40,000

(b) In a factory bonus system, bonus hours are credited to the employee in the proportion of time taken which time saved bears to time allowed. Jobs are carried forward from one week to another. No overtime is worked and payment is made in full for all units worked on, including those subsequently rejected. From the following information, calculate for each employee – (a) the bonus hours and amount of bonus earned, (b) the total wage costs, and (c) the wages cost of each good unit produced.

Particulars	**Rahul**	**Rajan**	**Rakesh**
Basic Wage Rate per hour	**₹25**	**₹40**	**₹30**
Units produced for production	**2,500**	**2,200**	**3,600**
Time allowed per 100 units	**2 hrs 36 mins**	**3 hrs**	**1 hr 30 mins**
Time taken	**52 hrs**	**75 hrs**	**48 hrs**
Rejects in units	**100**	**40**	**400**

[5]

Answer:

Worker	Rahul	Rajan	Rakesh
(i) Output (units)	2,500	2,200	3,600
(ii) Standard Time per 100 units	156 min	180 min	90 min
(iii) Time allowed for actual output	$\frac{2,500}{100} \times \frac{156}{60}$ = 65 hours	$\frac{2,200}{100} \times \frac{180}{60}$ = 66 hours	$\frac{3,600}{100} \times \frac{90}{60}$ = 54 hours
(iv) Time taken	52 hours	75 hours	48 hours
(v) Time saved [iii – iv]	13 hours	NA	6 hours
(vi) Bonus Hrs = Time saved ÷ Std Hrs x Time taken (v ÷iii)x iv	10.4 hours	NA	5.33 hours
(vii) Wage rate per hour	₹25	₹40	₹30
(viii) Therefore Bonus Earned = vi x vii	₹260	NIL	₹160
(ix) Basic Wages (iv x vii)	₹1,300	₹3,000	₹1,440
(x) Therefore, Total Wages = viii + ix	₹1,560	₹3,000	₹1,600
(xi) Number of rejects	100	40	400
(xii) Therefore No. of good units (i – xi)	2,400	2,160	3,200
(xiii) Cost per good unit (x ÷ xii)	₹0.65	₹1.39	₹0.50

5. (a) The budgeted production of a company is 20,000 units per month. The Standard Cost Sheet is as under –

Direct Materials	**1.5 kg. at ₹ 6 per kg.**
Direct Labour	**6 hours at ₹ 5 per hour**
Variable Overheads	**6 hours at ₹ 4 per hour**
Fixed Overheads	**₹ 3 per unit**
Selling Price	**₹ 72 per unit**

The following are the actual details for the month –

- **Actual Production and Sales = 18,750 units. There is no change in the selling price.**
- **Direct Materials consumed = 29,860 kg. at ₹5.25 per kg.**
- **Direct Labour Hours worked = 1,18,125 hours at ₹ 6 per hour.**
- **Actual Overheads were ₹ 5,65,000 out of which a sum of ₹ 40,000 was Fixed.**

Calculate:

(a) Direct Materials Usage and Price Variances.
(b) Direct Labour Efficiency and Rate Variances.
(c) Variable Overheads Efficiency and Expense Variances.
(d) Fixed Overheads Volume and Expense Variances.
(e) Sale Volume Variance in Sale Value and Gross Margin. [10]

Answer:

1. Sales Variances (Total Approach)		
(1) : BQ x BP	(2) : AQ x BP	(3) : AQ x AP
20,000 uts X ₹ 72 = ₹14,40,000	18,750 uts X ₹ 72 = ₹ 13,50,000	18,750 uts X ₹ 72 = ₹ 3,50,000

Volume Variance = ₹ 14,40,000 – ₹ 13,50,000 = ₹ 90,000 A
Price Variance = ₹ 13,50,000 + ₹ 13,50,000 = NIL
Total Sales Variance = Volume Variance + Price Variance
Total Sales Variance = ₹ 14,40,000 – ₹ 13,50,000 = ₹ 90,000 A

2. Sales Variances (Margin Approach)		
(1) : BQ x BM	(2) : AQ x BM	(3) : AQ x AM
20,000 uts X ₹ 6 = ₹ 1,20,000	18,750 uts X ₹ 6 = ₹ 1,12,500	18,750 uts X ₹ 6 = ₹ 1,12,500

Margin Volume Variance = ₹ 1,20,000 – ₹ 1,12,500 = ₹ 7,500 A
Margin Price Variance = ₹ 1,12,500 + ₹ 1,12,500 = NIL
Total Sales Variance = Margin Volume Variance + Margin Price Variance
Total Sales Variance = ₹ 1,20,000 – ₹ 1,12,500 = ₹ 7,500 A

Note: Since Budgeted Price = Actual Price, Budgeted Margin will be equal to Actual Margin.
So, BM = AM = Price – Standard Cost = ₹ 72 – (₹ 9 + ₹ 30 + ₹ 24 + ₹ 3) = ₹ 6 per unit.

3. Computation of Material Cost Variances

Col. (1): SQ x SP	Col. (2): AQ x SP	Col. (3): AQ x AP
(18,750 x 1.5) x ₹ 6 = ₹ 1,68,750	29,860 kg x ₹ 6 = ₹ 1,79,160	29,860 kg X ₹ 5.25 =₹1,56,765

Usage Variance = ₹ 1,68,750 – ₹ 1,79,160 = ₹ 10,410 A
Price Variance = ₹ 1,79,160 – ₹ 1,56,765 = ₹ 22,395 F
Total Material Cost Variance = Usage Variance + Price Variance
Total Material Cost Variance = ₹ 1,68,750 – ₹ 1,56,765 = ₹ 11,985 F

4. Computation of Labour Cost Variances

Col. (1): SH x SR	Col. (2): AH x SR	Col. (3): AH x AR
(18,750 x 6) x ₹ 5 = ₹ 5,62,500	1,18,125 hrs x ₹ 5 = ₹ 5,90,625	1,18,125 hrs x ₹ 6 = ₹ 7,08,750

Efficiency Var = ₹ 5,62,500 – ₹ 5,90,625 = ₹ 28,125 A
Rate Variance = ₹ 5,90,625 – ₹ 7,08,750 = ₹ 1,18,12A
Total Labour Cost Variance = Efficiency Var + Rate Variance
Total Labour Cost Variance = ₹ 5,62,500 – ₹ 7,08,750 = ₹ 1,46,250 A

5. Computation of VOH Cost variances

Col. (1): SH x SR	Col. (2): AH x SR	Col. (3): AVOH
(18,750 x 6) x ₹ 4 = ₹ 4,50,000	1,18,125 hrs x ₹ 4 = ₹ 4,72,500	5,65,000 – 40,000 = ₹ 5,25,000

Efficiency Var = ₹ 4,50,000 – ₹ 4,72,500 = ₹ 22,500 A
Expenditure Var = ₹ 4,72,500 – ₹ 5,25,000 = ₹ 52,500 A
Total VOH Cost Variance = Efficiency Var + Expenditure Var
Total VOH Cost Variance = ₹ 4,50,000 – ₹ 5,25,000 = ₹ 75,000 A

6. Computation of FOH Cost Variances

Col. (1): AO x SR	Col. (2): AH x SR	Col. (3): BFOH	Col. (4): AFOH
18,750 units x ₹ 4 p.u. = ₹ 56,250	1,18,125 hrs x ₹ 0.50 = ₹ 59,062.50	20,000 units x ₹ 3 p.u. = ₹ 60,000	Given ₹ 40,000

FOH Efficiency Variance = ₹ 56,250 – ₹ 59,062.50 = ₹ 2,812.50 A
FOH Capacity Variance = ₹ 59,062.50 – ₹ 60,000 = ₹ 937.50 A
FOH Expenditure Variance = ₹ 60,000 – ₹ 40,000 = ₹ 20,000 F

FOH Volume Variance = FOH Efficiency Variance + FOH Capacity Variance
FOH Volume Variance = ₹56,250 – ₹60,000 = ₹3,750 A

Total FOH Cost Variance = FOH Volume Variance + FOH Expenditure Variance b/fd as above

Total FOH Cost Variance = ₹56,250 – ₹40,000 = ₹ 16,250 F
Note: Since number of days information is not given, PFOH is not relevant in the above computation.

(b) A company manufactures two products X and Y. Product X requires 8 hours to produce while Product Y requires 12 hours. In April , of 22 effective working days of 8 hours a day, 1,200 units of X and 800 units of Y were produced. The Company employs 100 workers in the Production Department to produce X and Y. the Budgeted Hours are 1,86,000 for the year. Calculate Capacity, Activity and Efficiency Ratio and establish their inter-relationship. [5]

Answer:

Budget-Ratios can be easily computed using the FOH Variance Computation Chart, given below:-
When FOH Volume Variance related ratios are to be computed, the working notes are as under –

WN	(1)	(2)	(3)	(4)	(5)
Cost Factor	AO x SR	AH x SR	PFOH	BFOH	AFOH
Time Factor included in above	SH = Standard Hours	AS = Actual Hours	PH = Possible Hours	BH = Budgeted Hours	
Hours	(1,200 x 8) + (800 x 12) = 19,200 hours	22 days x 8 hours x 100 men = 17,600 hours	(Not Applicable in this question.)	$\frac{1,86,000}{12\text{ months}}$ = 15,500 hours	Not Applicable for Ratio Computation

Ratio	Time-based Computation	Output-based computation	WN Reference and Answer
1. Efficiency Ratio	$\frac{\text{Standard Hours}}{\text{Actual Hours}}$	$\frac{\text{Actual Output}}{\text{Standard Output}}$	$\frac{\text{WN 1}}{\text{WN 2}} = \frac{19,200\text{ hours}}{17,600\text{ hours}}$ = 109.09%
2. Capacity Ratio	$\frac{\text{Actual Hours}}{\text{Budgeted Hours}}$	$\frac{\text{Standard Output}}{\text{Budgeted Output}}$	$\frac{\text{WN 2}}{\text{WN 4}} = \frac{17,600\text{ hours}}{15,500\text{ hours}}$ = 113.55%
3. Volume or Level of Activity Ratio	$\frac{\text{Standard Hours}}{\text{Budgeted Hours}}$	$\frac{\text{Actual Output}}{\text{Budgeted Output}}$	$\frac{\text{WN 1}}{\text{WN 4}} = \frac{19,200\text{ hours}}{15,500\text{ hours}}$ = 123.87%

Relationship: Activity Ratio = Capacity Ratio x Efficiency Ratio = 113.55% x 109.09% = 123.87%.

Section B

Answer any two Questions [2x10]

6. (a) As a management consultant, you have an assignment to conduct a Management Audit of the production function of a medium-scale engineering unit. Prepare a check list of the points on which you should undertake the study. [6]

Answer:

Checklist for carrying out management audit of production function in a medium sized engineering unit:

i. How is the production plan prepared? Is it based entirely on market forecasts, or does it also take into account limitations of materials, personnel and finance?

ii. Are the product-mix decisions based on optimum profitability? What is the proportion of standard products and tailor-made items?

iii. Whether all infrastructure like machinery, materials, manpower and money have been assured at the scheduled time for uninterrupted production.

iv. Are there any constraints in achieving maximum capacity utilization? Are there any imbalances in the plant? If so, what steps are being contemplated to set right the imbalance?

v. Is it possible to subcontract some jobs to increase production capacity or maintain production in times of power-cuts etc.?

vi. What is the percentage of scrap, waste and rejects? Is it reasonable?

vii. Is the idle time being monitored regularly? Is it being analysed reason-wise? How much of it is due to machinery breakdown which is controllable by production department?

viii. Is there excess or shortage of manpower? How is the control exercised – time & motion study, incentives, labour budgets or any other means?

ix. Is there any wastage in consumption of utilities like power, fuel, steam, compressed air, etc.?

x. How effective is the material handling system? Are there any avoidable movements of materials?

xi. What is the system for preventive maintenance? If the in-house maintenance capability is not adequate, are there annual maintenance contracts for all important items of plant and machinery?

xii. How is the control exercised on inventory of stores and spares?

xiii. What is the procedure to handle breakdown emergencies?

xiv. Are all statutory requirements in regard to safety measures complied with?

xv. Are history cards available for all plant and machinery giving details of downtime, replacement of parts, etc?

xvi. Does the system provide for flexibility or change of production schedules to execute urgent orders or changes in the product mix?

(b) Explain the needs for Capacity determination. [4]

Answer:

Need for Capacity Determination

The need for determining "production capacity" in respect of industrial organisation in India arises from the following reasons:-

(i) To meet the requirement under Section 211 of the Companies Act, 1956, that prescribes the form and contents of the balance sheet as well as profit and loss account (Part II of the Schedule VI of the Companies Act).

(ii) For purpose of Cost Audit Report under section 233 – B of the Companies Act, 1956 where a cost audit has been ordered by Government.

(iii) For internal management purpose, to be used:
- in planning, scheduling and controlling production, and
- in planning expansion of capacity and correction of imbalances.

(iv) For assessment of capacities for national level planning.

(v) For fixing the price of product(s) after ascertaining the capacity costs and per unit incidence thereof, and

(vi) For determination of allotment of scarce raw-materials in the form of quotas, import licenses, etc.

7. 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 organisation 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?

8. (a) Explain the objectives of Internal Control. [5]

Answer:

Objectives of Internal Control
Each organization must have a system of internal control in place for achieving the preset goals. Other than accomplishing the desired goals and objectives of the organization, this system plays a very important role in any organization. The main objectives of internal control are as follows:

i) Compliance: To have compliance with law and the accounting practices generally accepted and followed in the country. The accounting process also needs to be in compliance with these.

ii) Reliance: To increase the reliance on the internal systems, people and accounting practices followed by the organization, so that the chances of frauds are reduced.

iii) Safeguarding: To safeguard the organization's accounts, employees and assets by formation of fool-proof policies, rules and regulations.

iv) Security: To provide security to customers, employees and property of the organization. Physical security systems like security guards, locks and anti-theft devices are used for providing protection.

v) Increased efficiency: To assist in human resource and performance management, and to keep proper control over business activities to achieve maximum levels of efficiency.

vi) Evaluation: To evaluate the accounting system for proper authorization of transactions.

vii) Review and correction: To review the working of the business, locate weak points in operations and to take corrective measures for proper working.

viii) Authorization: To provide proper authority for purchase, sale, valuation, verification and possession of assets.

ix) Delegation: To provide for division of duties among the employees where all staff members work cohesively.

x) Accurate planning: To ensure that the auditors and the accountants of the organization make all the financial reports correctly and to ensure that financial planning is done accurately.

xi) Conformity with accounting principles: To conform to the basic accounting concepts, and principles and lc1.ws governing the organization.

xii) Resource utilization: To ensure that all the resources: man, material, money and machines of the organization are optimally used.

xiii) Safeguarding of resources:To protect the resources of the organization against mismanagement or fraud and to ensure that the company's activities are in accordance with laws and regulations.

xiv) Setting future Corporate Goals: An efficient system of internal control helps the organization in goal setting. However, the organization should have certain policies, rules and regulations in place to achieve the preset goals.

(b) What are the differences between Internal Audit and Operational Audit. [5]

Answer:

Differences between Internal Audit and Operational Audit:

	Internal Audit	Operational Audit
i.	Compliance objective	Risk identification, process improvement objective
ii.	Financial accounts focus	Business focus
iii.	Audit focus	Efficiency & improvement focus
iv.	Transaction-based	Process-based
v.	Policies and procedures focus	Risk management focus
vi.	Cost Centre wise budget monitoring	Accountability for performance improvement Results
vii.	Focus on policies, transactions and compliance	Focus on goals, strategies and risk management Processes

Section c

Answer any two questions [2x10=20]

9. (a) State the application of Management accounting Tools. [10]

Answer:

The performance measurement involves collection of information, analysing the same by establishing the interrelations between them, interpreting the results and then arriving at meaningful conclusion. The collection of information depends upon various sources of data and other reports for various systems used by the organisation.

The data input is generally made in the accounting system used by the company e.g. the ERP systems. Most of the ERP systems facilitate input and capturing of even the non-financial data which can be then processed to produce desired reports. There is a lot of information to be accessed from outside of the ERP system. The cost auditor should identify such sources within and outside of the organisation and use information drawn from the same.

The management accounting tools could be used to analyse the performance with different purposes. The cost auditor should verify the tools and techniques used by the company and comment on appropriateness and adequacy thereof. The cost auditor could recommend more appropriate management accounting tool.

The following table shows various management accounting tools that are used to serve different objectives:

Purpose	Management Accounting Tool
Control	Budgetary control, standard costing, variance analysis
Cost computation	Full(absorption) Costing, Job, batch, process or contract costing Activity based costing, Time Driven ABC
Cost reduction	Total Quality management, Quality costing, Kaizen costing, Lean manufacturing, Value Analysis and Value Engineering, Six Sigma
Pricing and decision making	Target costing, Life cycle costing, Throughput accounting, Variable or marginal costing
Total performance management	Balanced Scorecard, Performance Prism, Performance pyramid, Business Objects, Business Intelligence

The cost auditor should be acquainted with the intricacies of these and such other tools and what it takes to successfully implement and use them. The success of Performance Appraisal Report would depend upon not how many performance measure are considered, but upon how they are evaluated and assessed with the help of various management accounting tools.

(b) 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 JKL 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 Petro Ltd.

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)= $\frac{\text{Profit after tax}}{\text{Net Worth}} = \frac{268}{4,954} \times 100 = 5.41\%$

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 + Average of Opening and closing of Net Current Assets

= (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.

(c) What are the other area that could be covered in the Performance Appraisal Report? [10]

Answer:

Other area that could be covered in the Performance Appraisal Report

Depending upon the specific characteristics of the industry within which a company operates, the performance criteria should be chosen and included in the Performance Appraisal Report. It may be necessary to drop one or more of the mentioned area on the basis of their relative importance (or the lack of it) for the organisation.

Some additional areas of performance assessment actually may not directly comment upon the current or past performance but the likely future performance. The cost auditor should make use of the non-financial measures of performance that signal the direction in which the future performance is being driven. The various non-financial measures are listed in the appendix B.

Another set of parameters could company specific. The companies may track performance using parameters such as EVA and therefore the assessment will have to be done to meet the specific requirement.

The listed companies clearly bring out business specific factors that may affect their performance going forward. This is usually given in the "management discussion and analysis" in the annual reports. The cost auditor should benchmark these with companies in the same industry and provide observation thereon.

(i) Risk Management: The Performance Appraisal Report should include the risk analysis that may affect the future performance. These could be macro variables causing variations like the economic indicators of India such as industrial growth trends, Government policy on commerce and trade, interest rates, international growth etc. The risks facing the business could arise out of technological changes, entry of competition, stages of product life cycle, FOREX rate movements, shifts in customer preferences, credit risks, etc. The cost auditor should

- Identify the sources of various risks
- Assess the potential downside or upside effect thereof
- Comment whether the risks are worth taking or suggest the acceptable range
- Recommend risk mitigation tools and techniques to be used
- Evaluate the effect of the existing risk mitigation tools used by the company

(ii) Environment and Sustainability: The Performance Appraisal Report could provide insight into how effectively the company is following policies on CSR, environment and sustainability. The importance of economic, social and environmental performance hardly needs any justification. The CSR index could be formulated to reflect performance in respect of socially responsible products, socially responsible processes and socially responsible employee relationships. The index could comprise of spending by the company on these as a percentage of turnover. Similarly, the economic benefits from the environmental & sustainability initiatives could be indexed to the costs of such initiatives and reported.

(iii) Quality Performance: Quality is another important performance area. The cost auditor could include analysis of quality performance of the company. The quality performance could be assessed by relating the quality costs incurred versus the benefits achieved by reduction in customer complaints or increase in customer satisfaction index. The quality costs should be reported as prevention costs, appraisal costs, internal failure costs and external failure costs. It will be useful to analyse the changes in the composition of total quality costs and their impact on the sales and profits, e.g. higher spending on prevention would mean less costs on external failures, which in turn would reduce customer complaints and could bring in higher sales. Such analysis would provide good value for the user of the Performance Appraisal Report.

(iv) R & D Performance: The future performance of companies would depend upon their success of the R & D initiatives. The cost auditor could provide a useful lead in this respect by including analysis of the R & D costs. The analysis may include, inter alia, the percentage of successful research initiatives, the turnaround time taken for development, the response time taken for changes in designs due to customer requirement etc. Total expenditure on R & D initiatives as a percentage of sales turnover may be a good indicator of the technology leadership status of the company.

(v) Business Process Performance: The cost auditor could evaluate various processes followed by the company and incorporate valuable assessment in the Performance Appraisal

Report. The processes could be evaluated on the criteria like speed, accuracy, empowerment, hurdles, facilitation etc. The process performance would have a bearing on costs and profitability of the organisation. Transparent and ethical business processes would enhance the corporate image of the company and hence the cost auditor could bring out clearly how far the exiting processes need to be modified. The cost auditor could suggest best practice adoption approach from the benchmarked processes of the industry. This data is usually available in the published case studies. It would be appropriate to highlight the processes that should be re-engineered.

(vi) Human Resource Accounting: This is an extended analysis of total human resource costs, both explicit and implicit, which are capitalised at an appropriate discount rate. This value of human capital is reflection of the enhanced value that an organisation could create by owning the human asset. The cost auditor could observe the value of human asset and link it to the returns. This is an upcoming performance measurement criterion.

(vii) Value Added Analysis: The performance of a company could be measured in terms of the value based approach. The value added is measured as an absolute value created by the business and the distribution thereof to the employees and other providers of capital. The growth in the value added over a period of time could be observed and commented upon.

(viii) Performance of Intangible Assets: The business may have internally developed intangible assets. In financial accounting these are generally not capitalised. It is possible to use value based approach. The value created by the intangibles could be computed as excess returns earned by the company over the industry average. This excess is supposed to be earned due to the presence of intangible assets like brand.

(ix) Stakeholder Performance Analysis: This would mean analysing various performance parameters for the different stakeholders. The performance for shareholders could be denoted by EPS growth, the stock price performance, market capitalization, dividend growth, EVA etc. The lenders' parameters would be interest coverage and debt-service cover ratios. The suppliers would look for business growth, and on time payments. Customers expect on time delivery, proper pre and post sales service, and reasonable prices. These are performance metrics could be included in the Performance Appraisal Report.