Paper 19 - COST AND MANAGEMENT AUDIT

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

Working Notes should form part of the answer.

—Wherever necessary, suitable assumptions should be made and indicated in answer by the candidates.

1. Answer the four Questions [15×4=60]

(a) (i) A Company is engaged in both Regulated and Non-Regulated sectors and all its products are not covered under the Rules. How to determine applicability of cost audit for the products covered under the Regulated and Non-Regulated sectors since different threshold limits have been prescribed under Rule 4?

(ii) What would be the treatment of cost consumption of electricity from a captive generating plant and applicability of cost audit to such captive generating plants?

(8+4 = 12 Marks)

Answer:

(i) Rule 4 states that cost audit would be applicable for products under:

(a) Table A if the overall turnover of the company is at least ₹ 50 crore and

(b) Table B if the overall turnover of the company is ₹ 100 crore.

Hence, the coverage of cost audit for a company where all its products are covered under Table A or Table B or a combination of the two would be guided by these threshold limits.

In case of a multi-product company where all its products are not covered under Table A or Table B or a combination of both, then the following would apply:

a) If the overall turnover of the company is more than ₹ 50 crore but less than ₹ 100 crore, then only products covered under Table-A will be covered under cost audit provided the sum total of all the products of the company covered under Table A and Table B is more than ₹25 crore.

b) If the overall turnover of the company is more than ₹ 100 crore, then:

   i. products under both Table A and Table B will be covered under cost audit provided the sum total of all the products of the company covered under Table A and Table B is more than Rs.35 crore

ii. only products of Table A will be covered if the sum total of all the products of the company covered under Table A and Table B is more than ₹ 25 crore but less than ₹ 35 crore.

Explanation: Rule 4 has defined threshold limits for Table A and Table B separately but the aggregate turnover of the individual product or products or service or services has been defined to be all products for which cost records are required to be maintained under rule 3.

(ii) Rule 3(A)(2) dealing with generation, transmission, distribution and supply of electricity has excluded captive generation as defined in the Electricity Rules, 2005. It may be noted that in case of a company whose product(s)/service(s) are covered under the Rules and it consumes electricity from the captive generating plant, determination of cost of generation, transmission, distribution and supply of electricity as per CRA-1 would be mandatory since the cost of consumption of electricity has to be at cost. Hence, maintenance of cost records for generation, transmission, distribution and supply of electricity would be applicable. However, cost audit will not be applicable to such captive plants, provided the entire generation is consumed captively and no portion is sold outside.

(iii) Is a cost auditor required to audit and certify monthly, quarterly, half-yearly and yearly cost statements? (3 marks)

Answer:

As per Rule 5, every company under these rules including all units and branches thereof are required, in respect of each of its financial year, to maintain cost records in form CRA-1. The cost records are required to be maintained on regular basis in such manner so as to facilitate calculation of 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 or quarterly or half-yearly or annual basis. The cost auditor is appointed to conduct audit of the cost records and make report thereon for the financial year for which he is appointed. It is not incumbent upon the cost auditor to certify monthly, quarterly, half-yearly cost statements.

(b) (i) The Rules state that cost records are to be maintained in Form CRA-1. However, CRA-1 does not prescribe any format but only provides principles to be followed for different cost elements. What are the role and status of Cost Accounting Standards/GACAP and its applicability vis-à-vis CRA-1? (6 Marks)

Answer:

The principles of maintenance of cost accounting records have been notified in the Rules in CRA-1. The principles are in sync with the cost accounting standards. The Rules are principle based and no formats have been prescribed for maintenance of cost accounting records like pre-2011 industry specific rules. No separate format based records maintenance has been prescribed even for the Regulated Industry and the prescription has left it open for industry to maintain cost accounting records according to its size and nature of business so long as it determines a true and fair view of the cost of production, cost of sales and margin of the products/services. The cost audit report is required to be in conformity with the "cost auditing standards" as referred to in Section 148 of the Companies Act, 2013.

It is also to be noted that the Council of the Institute of Cost Accountants of India has made it mandatory for cost accountants in practice to follow and conform to the Cost Accounting Standards issued by it and it is incumbent on the cost auditors to report any deviations from cost accounting standards.

(ii) Is maintenance of cost accounting records mandatory for a multi-product company where all the products are not covered under the Rules even if the Turnover of the individual product/s that are covered under the Rules is less than rupees thirty five crores? (4 Marks)

Answer:

The Rules provide threshold limits for the company as a whole irrespective of whether all its products are as per the prescribed industry/sector provided under Table A or Table B. The Rules do not provide any minimum product specific threshold limits for maintenance of cost accounting records and consequently the company would be required to maintain cost accounting records for the products covered under Table-A or Table-B or both even if the turnover of such products is below rupees thirty five crores.

(iii) Whether separate Form CRA-2 is required to be filed by a company having two or more different types of products covered under cost audit? (5 Marks)

Answer:

CRA-2 Form (intimation for appointment of cost auditor to Central Government) has replaced the earlier Form 23C (application seeking approval for appointment of cost auditor). A single Form CRA-2 is required to be filed providing details of the sectors/industries covered under cost audit and details of cost auditor. For Companies appointing multiple cost auditors, only one single Form CRA-2 is required to be filed. Provision has been made in the Form to accommodate details of multiple cost auditors.

(c) (i) What are the eligibility criteria for appointment as a cost auditor? (12 Marks)

Answer:

Eligibility Criteria under Section 141 of the Companies Act, 2013 read with Rule 10 of the Companies (Audit and Auditors) Rules, 2014 and Section 148 of the Companies Act, 2013. The following persons are not eligible for appointment as a cost auditor:

a) A body corporate. However, a Limited Liability partnership registered under the Limited Liability Partnership Act, 2008 can be appointed. *[Section 141(3)(a)]*.

b) An officer or employee of the company. *[Section 141(3)(b)]*.

c) A person who is a partner, or who is in the employment, of an officer or employee of the company. *[Section 141(3)(c)]*.

d) A person who, or his relative or partner is holding any security of or interest in the company or any of its subsidiary or of its holding or associate company or a subsidiary of such holding company. *[Section 141(3)(d)(i)]*.

e) Relatives of any partner of the firm holding any security of or interest in the company of face value exceeding Rs. 1 lakh. *[Section 141(3)(d)(i) and Rule 10(1) of Companies (Audit and Auditors) Rules, 2014]*.

f) A person who is indebted to the company or its subsidiary, or its holding or associate company or a subsidiary or such holding company, for an amount exceeding Rs. 5 lakhs. *[Section 141(3)(d)(ii) and Rule 10(2) of Companies (Audit and Auditors) Rules, 2014]*.

g) A person who has given any guarantee or provided any security in connection with the indebtedness of any third person to the company or its subsidiary, or its holding or associate company or a subsidiary of such holding company, for an amount exceeding Rs. 1 lakh. *[Section 141(3)(d)(iii) and Rule 10(3) of Companies (Audit and Auditors) Rules, 2014]*.

h) A person or a firm who, whether directly or indirectly, has business relationship with the company or its subsidiary, or its holding or associate company or subsidiary of such holding company or associate company. *[Section 141(3)(e) and Rule 10(4) of Companies (Audit and Auditors) Rules, 2014]*.

"Business Relationship" is defined in *Rule 10(4) of Companies (Audit and Auditors) Rules, 2014* and the same shall be construed as any transaction entered into for a commercial purpose, except commercial transactions which are in the nature of professional services permitted to be rendered by a cost auditor or a cost audit firm under the Act and commercial transactions which are in the ordinary course of business of the company at arm's length price - like sale of products or services to the cost auditor, as customer, in the ordinary course of business, by companies engaged in the business of telecommunications, airlines, hospitals, hotels and such other similar businesses.

i) A person whose relative is a director or is in the employment of the company as a director or key managerial personnel of the company. *[Section 141(3)(f)]*.

j) A person who is in the full time employment elsewhere or a person or a partner of a firm holding appointment as its auditor if such person or persons is at the date of such appointment or reappointment holding appointment as auditor of more than twenty companies. *[Section 141(3)(g)]*.

k) A person who has been convicted by a court for an offence involving fraud and a period of ten years has not elapsed from the date of such conviction. *[Section 141(3)(h)]*.

l) Any person whose subsidiary or associate company or any other form of entity, is engaged as on date of appointment in consulting and providing specialised services to the company and its subsidiary companies: *[Section 141(3)(i) and Section 144]*.

(a) accounting and book keeping services

(b) internal audit

(c) design and implementation of any financial information system

(d) actuarial services

(e) investment advisory services

(f) investment banking services

(g) rendering of outsourced financial services

(h) management services

(C)(ii) Whether remuneration payable to Managerial Personnel including Executive Directors on the Board and other officers of a corporate body under a statute will be considered as part of the Employee Cost of the year under reference or whether the whole or part of the remuneration is computed as a percentage of profits? (3 Marks)

Answer:

a) Remuneration paid to officers, managers and executive directors of a corporate body whether paid as a fixed amount or paid whole or part of the remuneration as percentage of profits should be treated as employee cost. Remuneration covers fixed salary, PF contribution, leave, superannuation and severance payment, and other benefits, besides commission, etc. Other benefits include free furnished residential accommodation or house rent allowance, leave travel concession, reimbursement of medical expenses for self and family, personal accident insurance, fully maintained company's car with driver, gardener, watchmen, electricity.

b) Remuneration paid to managerial personnel will be identified as production, administrative or selling overhead on the basis of services provided by them. However, the remuneration paid to non-executive directors should be treated as Administrative Overheads.

(d) (i) Determine the cost of production on manufacture of the under-mentioned product for purpose of captive consumption in terms of Rule 8 of the Central Excise Valuation (DPE) Rules, 2000 - Direct material - ₹ 23,200, Direct Wages & Salaries - ₹ 5,400, Direct Expenses - ₹3,000, Works Overheads - ₹ 5,200, Quality Control Costs - ₹ 4,000, Research and Development Costs - ₹2,400, Administrative Overheads - ₹ 4,600, Selling and Distribution Costs ₹ 1,600, Realisable Value of Scrap - ₹ 1,200. Administrative overheads are in relation to production activities. Material cost includes Excise duty ₹ 2,108. (8 Marks)

Solution:

Cost of production is required to be computed as per CAS-4. Material cost is required to be exclusive of CENVAT credit available.

Particulars	Amount (₹)
Material Consumed (Net of Excise duty) (23,200 – 2,108)	21,092
Direct Wages and Salaries	5,400
Direct Expenses	3,000
Works Overheads	5,200
Quality Control Cost	4,000
Research and Development Cost	2,400
Administrative Overheads	4,600
Less: Sale of Scrap	(1,200)
Cost of Production	44,492
Add: 10% Profit margin on cost of production (i.e. 33,946 x 10%)	4,449
Assessable Value as per Rule 8 of the Valuation Rules	**48,941**

Note - Actual profit margin earned is not relevant for excise valuation.

(d) (ii) Gross pay ₹10,20,000 (including cost of idle time hours paid to employee ₹25,000); Accommodation provided to employee free of cost [this accommodation is owned by employer, depreciation of accommodation ₹2,00,000, maintenance charges of the accommodation ₹50,000, municipal tax paid for this accommodation ₹10,000], Employer's Contribution to P.F. ₹1,00,000 (including a penalty of ₹2,000 for violation of PF Rules), Employee's Contribution to P.F. ₹75,000. Compute the Employee cost. (7 Marks)

Solution:

Computation of Employee Cost

	Particulars	Amount (₹)
	Gross Pay (Net of cost of idle time) (10,20,000 - 25,000)	9,95,000
Add	Cost of accommodation provided by employer = Depreciation (+) Municipal Tax paid (+) maintenance charges = (2,00,000 + 50,000 + 10,000)	2,60,000
Add	Employer's Contribution to PF excluding penalty paid to PF authorities (1,00,000 - 2,000)	98,000
	Employee Cost	**13,53,000**

Note:

(i) Assumed that the entire accommodation is exclusively used by the employee. Hence, cost of accommodation provided includes all related expenses/costs, since these are identifiable/traceable to the cost centre.

(ii) Cost of idle time hours is an excludible item. Since it is already included in the gross pay, hence excluded.

(iii) Penalty paid to PF authorities is not a normal cost. Since, it is included in the amount of contribution, it is excluded.

(e) (i) Is there any obligation on the part of cost auditor to report offence of fraud being or has been committed in the Company by its officers or employees? (6 Marks)

Answer:

Sub-rule (7) of Rule 6 of the Companies (Cost Records and Audit) Rules 2014 states that "*the provisions of sub-section (12) of section 143 of the Act and the relevant rules made thereunder shall apply mutatis mutandis to a cost auditor during performance of his functions under section 148 of the Act and these rules*".

As per sub-section (12) of section 143 of the Companies Act 2013, *extract of which is given above*, it is obligatory on the part of cost auditor to report offence of fraud which is being or has been committed in the company by its officers or employees, to the Central Government as per the prescribed procedure under the Rules.

As per the proviso to above sub-section, it has been stated that in case of a fraud involving lesser than the specified amount, the auditor shall report the matter to the audit committee constituted under section 177 or to the Board in other cases within such time and in such manner as may be prescribed.

(e)(ii) The Companies Act, 2013 has introduced provision regarding rotation of auditors. Is the provision of rotation of auditors applicable to cost auditors also? (6 Marks)

Answer:

The provisions for maintenance of cost accounting records and cost audit are governed by Section 148 of the Companies Act, 2013. The provisions of Section 148 clearly states that no person appointed under Section 139 as an auditor of the company shall be appointed for conducting audit of cost records of the company. Section 148 also provides that qualifications, disqualifications, rights, duties and obligations applicable to auditors (financial) shall apply to a cost auditor appointed under this section. The eligibility, qualifications and disqualifications are provided in Section 141 of the Act and powers and duties are provided in Section 143. Section 143(14) specifically states that the provisions of Section 143 shall *mutatis mutandis* apply to a cost auditor appointed under Section 148. There are no other provisions governing the appointment of a cost auditor.

Section 139(3) of the Act, applicable to appointment of auditors (financial), and Rule 6 of Companies (Audit and Auditors) Rules, 2014 deals with the provision of rotation of auditors and these provisions are applicable only to appointment of auditors (financial). The Act does not provide for rotation in case of appointment of cost auditors and the same is not applicable to a cost auditor. It may, however, be noted that though there is no statutory provision for rotation of cost auditors, individual companies may do so as a part of their policy, as is the practice with Public Sector Undertakings.

(e)(iii) What is the difference between Cost Accounting policy and Cost Accounting system?

(3 Marks)

Answer:

Cost Accounting Policy of a company state the policy adopted by the company for treatment of individual cost components in cost determination.

The Cost Accounting system of a company, on the other hand, provides a flow of the cost accounting data/information across the activity flow culminating in arriving at the cost of final product/service.

(2) Answer any two questions [10×2=20]

(a)(i) What are the scope of internal control of a company. (4 Marks)

Answer:

Scope of internal control

Internal control is an essential pre-requisite for efficient and effective management of any organisation and is therefore, a fundamental ingredient for the successful operation of the business in modern days. In fact, an effective internal control system is a critical success factor for any organization in the long term. They are indispensable tools for the ever-increasing risks, exposures, and threats to accounting systems, data, and assets. It embraces the whole system of controls – financial, operational or otherwise, established by the management in the functioning of a business including internal check, internal audit and other forms of control. In fact, internal control has now been recognized as fundamental and indispensable to modern auditing. Thus internal control has its all-embracing nature and is concerned with the controls operative in every area of corporate activity as well as with the way in which individual controls interrelate.

The scope of internal control, according to the aforesaid definitions, extends well beyond accounting control. Thus, the latest definition of internal control encompasses operational controls like quality control, work standards, budgetary control, periodic reporting, policy appraisals, quantitative control, etc., as all parts of the internal control system. In an independent financial audit or the statutory audit, the auditor is concerned mainly with the financial and accounting controls. However, in an operational audit (as part of internal controls), the auditor reviews all the controls including operational functions. The internal controls can be broadly classified into following four main categories: financial & accounting controls, administrative controls, operational controls and compliance controls.

(i) **Administrative control –** Administrative controls include all types of managerial controls related to the decision-making process. An example of administrative controls is the maintenance of records giving details of customers contacted by the salesmen.

(ii) **Operational control –** This is exercised through "management accounting" techniques viz. budgetary control, standard costing etc.

(iii) **Financial and Accounting control –** This control refers primarily the management plans, objectives and procedures that are concerned with the safeguarding of assets, prevention and detection of fraud and error, accuracy and completeness of accounting records, and timely preparation of reliable financial information.

(iv) Compliance control - These controls aim at ensuring compliance with applicable laws and regulations. These Controls also help to ensure compliance with laws regarding the system and intellectual property.

(a)(ii) What are the factors need to be considered while designing an internal control system?

(6 Marks)

Answer:

While designing an internal control system, the following factors must be considered to ensure greater chances of successful internal control system.

- **Segregation and Rotation of duties:** It is very necessary for successful internal control system that no one person handles the complete transaction i.e., those who physically handle assets are not those who record the asset movements also. The systems are so designed that no single individual is responsible for all the stages involved in a transaction i.e., duties are allocated in such a way that no single individual has an exclusive control over any one transaction or a group of transactions. Similarly, the people responsible for authorizing these transactions or reconciling of the records should also be different i.e., the work done by one person is either complementary to the work done by other person or the accuracy or correctness of work done by one person is independently checked by another person. The broad functions which are generally segregated are:

  (a) Execution of transactions;

  (b) Authorization of transactions;

  (c) Maintenance of records and documents; and

  (d) Physical custody of related assets.

  Apart from segregation of duties, it is sometimes considered more desirable to rotate the duties of various officers and staff in an attempt to ensure that a fraud or error, if any may not remain undetected for a very long time. It also ensures that a person does not develop a vested interest by holding to a post for a very long time. In addition, it removes the impression of indispensability about an employee. This also ensures that the job profile of each post is well defined because employees can be rotated only if the content of each respective job is well defined.

- **Competence and integrity of people:** Internal control systems are not an end to themselves unless these systems are manned by the competent people, who are honest enough to consistently do so. The controls to be successful and effective necessitate the need for competent people to enforce such controls. In other words, the presence of detailed procedures may have no meaning unless these procedures are carried by the competent people, who can also envisage the changes required in the system over a period of time.

- **Appropriate levels of authority.** A common error usually made is to grant too much authority within control boundaries. Sometimes, this is deliberately done to expedite the things or to handle the emergencies. This is sometimes done to reduce the number of people i.e., cost reduction. However, controls to be effective require the authority to be granted on a need-to have basis only. If there is no need for a particular person to have a specific authority, he/she should not be granted such authority.

- **Accountability.** The internal controls to be successful presuppose that there is full accountability for all the decisions taken and there are controls present, which allow the determination with acceptable level of confidence of a person taking particular decision or authorizing particular transaction or took specific action. However, mere presence of these controls may have no meaning or may give a false sense of security unless strict action is taken every time, a discrepancy is noticed. Other wise these controls may be left with no meaning.
- **Adequate resources.** Controls that are enforced with inadequate resources (manpower, finance, equipment, materials, and methodologies) will generally fail whenever they come under stress. Therefore, it is very necessary that minimum resources necessary to enforce the controls must always be present to enable the controls to be successful and effective.
- **Supervision and periodical updation:** Unfortunately, many people prefer to work only if they are being supervised or watched. It is, therefore very necessary for the controls to be adequately supervised and periodically updated in line with changing environment to be effective and successful. For example, in case of banks, if new service i.e., internet banking is also being started, it is very necessary that internal control system is also updated accordingly.

(b)(i) Give a brief note on objectives and advantages of budgetary control of an organization?

(5 Marks)

Answer:

The objectives and consequently the advantages of budgetary control will be felt throughout the whole organization, as a sound system of budgetary control –

(1) combines the ideas of different levels of management in the preparation of the budget;

(2) coordinates all the activities of business in order to centralize control but decentralize responsibility onto each manager involved;

(3) plans and controls income and expenditure so as to achieve the highest profitability acts as a guide for management decisions;

(4) ensures sufficient working capital and other resources for the efficient operation of the business;

(5) directs capital expenditure in the most profitable direction;

(6) reduces wastes and losses to minimum and thus ensures in increase in productivity as regards men, machines and materials;

(7) provides a yardstick against which actual results can be compared; and

(8) shows management where effort is needed to remedy the situation without any delay.

In order that a budgetary control is operated effectively, there must be an efficient ogranisation for budgetary control. The budgetary control organisation is responsible to the chief executive of a business. An advantage to this system is that decisions can be taken at the highest level where there is a conflict between the aims of the managers of two or more divisions. Moreover, where budgetary control has the support of the chief executive, those executives or managers who are responsible to him will fully cooperate and place more reliance on budgetary control. While the chief executive bears the responsibility for the effectiveness of the budget, the detailed preparation and administration of budgetary control is always delegated to subordinates as a functional responsibility and particularly to the budget committee with the budget officer as a secretary to the budget committee.

(b)(ii) What are the benefits of management audit? (5 Marks)

Answer:

Benefits of Management Audit

All progressive organizations undertake voluntary management audit due to its benefits as under:-

(i) It helps management in framing basic policies for the organisation and to define objectives.

(ii) In pursuance of the objectives of the organizations, management audit helps in preparing a viable and achievable plan for the organisation.

(iii) It helps in setting up an organizational framework to implement the plans.

(iv) It assists in designing systems and procedures for smooth operation of the organisation.

(v) It helps in designing and reviewing management information system (MIS) for decision making to help in coordination, motivation and control of the operations.

(vi) It assists in analyzing SWOT (strengths, weaknesses, opportunities and threats) of the organisation and assists in marketing the organisation stronger.

(vii) In a developing country like India, management audit through CAG, public accounts committee and parliamentary committee on public undertakings, has helped the Government in identifying improper or wasteful use of funds, checking extravagant organization practices and curving ineffective use of physical resources.

(viii) Indian financial Institutions, banks and Board for Industrial Finance and Reconstruction (BIFR) have found management audit (called concurrent audit) useful in monitoring sick industrial units and to help the units in their rehabilitation.

(ix) The Railways of India have subjected their finances to open discussion by public to improve resource mobilization, reduce cost of operations and conserve their scarce resources which are main objectives of management audit.

(x) It can help in analyzing social-cost benefit analyses for public projects like dams, power houses, national highways etc.

(xi) It is essential whenever a unit is planned to be taken-over or an amalgamation or merger with other unit is proposed.

(c) 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. (10 Marks)

Answer:

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

1. 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?
2. Are the product-mix decisions based on optimum profitability? What is the proportion of standard products and tailor-made items?
3. Whether all infrastructure like machinery, materials, manpower and money have been assured at the scheduled time for uninterrupted production.

4. 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?
5. Is it possible to subcontract some jobs to increase production capacity or maintain production in times of power-cuts etc.?
6. What is the percentage of scrap, waste and rejects? Is it reasonable?
7. 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?
8. Is there excess or shortage of manpower? How is the control exercised – time & motion study, incentives, labour budgets or any other means?
9. Is there any wastage in consumption of utilities like power, fuel, steam, compressed air, etc.?
10. How effective is the material handling system? Are there any avoidable movements of materials?
11. 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?
12. How is the control exercised on inventory of stores and spares?
13. What is the procedure to handle breakdown emergencies?
14. Are all statutory requirements in regard to safety measures complied with?
15. Are history cards available for all plant and machinery giving details of downtime, replacement of parts, etc?
16. Does the system provide for flexibility or change of production schedules to execute urgent orders or changes in the product mix?

(3) Answer any two questions [10×2=20]

(a) The Balance Sheets of Surya Ltd for the last 3 years read as follows:

	₹ in lakhs		
	As on 31 March 2013	**As on 31 March 2014**	**As on 31 March 2015**
Sources of Fund:			
Share Capital [Share of ₹10 each]	**2,200**	**2,200**	**3,200**
Securities Premium	**1,900**	**2,000**	**700**
Reserves [After 10% Dividend]	**1,900**	**2,100**	**1,900**
Long-term Loan	**1,750**	**1,550**	**2,600**
Total Funds	**7,750**	**7,850**	**8,400**

Represented by:			
Fixed Assets	**2,800**	**3,200**	**3,500**
Less: Depreciation	**800**	**1,050**	**1,300**
	2,000	**2,150**	**2,200**
Capital WIP [work-in-progress]	**1,000**	**1,100**	**1,200**
Investment	**600**	**700**	**650**
A.	**3,600**	**3,950**	**4,050**
Net Current Assets:			
Current Assets:			
Debtors	**1,800**	**1,950**	**2,150**
Stock	**1,900**	**2,050**	**2,700**
Cash & Bank	**800**	**800**	**800**
Others	**550**	**750**	**1,800**
	5,050	**5,550**	**7,450**
Less: Current Liabilities	**900**	**1,650**	**3,100**
B.	**4,150**	**3,900**	**4,350**
Total Assets [A+B]	**7,750**	**7,850**	**8,400**
Sales [excluding Excise Duty and Sales Tax @ 20%]	**4,050**	**4,200**	**5,400**

I. Calculate & analyse for the year 2013-14 and 2014-15:
- **i. Fixed Asset Turnover Ratio**
- **ii. Stock Turnover Ratio**
- **iii. Debtors' 'Turnover Ratio in terms of number of days'**
- **iv. Debt-Equity Ratio**
- **v. Current assets to current liability**

II. Briefly comment on the performance of the company. (10 Marks)

Answer:

Calculation of ratio for the year 2013-14 & 2014-15

	2013-14	2014-15
(i) Fixed Asset Turnover Ratio $\frac{\text{Net sales excluding Excise Duty \& Sales Tax}}{\text{Average Fixed Asset}}$	$\frac{4,200}{2,075}$ = 2.02 times	$\frac{5,400}{2,175}$ = 2.48 times
(ii) Stock Turnover Ratio $\frac{\text{Net sales excluding Excise Duty \& Sales Tax}}{\text{Average Stock}}$	$\frac{4,200}{1,975}$ = 2.13 times	$\frac{5,400}{2,375}$ = 2.27 times

(iii) Debtors' Turnover Ratio [in term of no. of days' sales $\frac{\text{Average Receivables}}{\text{Credit Sales including Excise duty and Sales Tax}} \times \text{No. of days in the year}$	$\frac{1,875}{5,040} \times 365 = 136$ days	$\frac{2,050}{6,480} \times 365 = 115$ days
(iv) Debt-Equity Ratio $\frac{\text{Debt}}{\text{Equity}}$	1,550/ 6,300 =0.25	2,600/ 5,800 =0.45
(v) Current Ratio = Current Assets/ Current liability	5,550/1,650 = 3.36	7,450/3,100 = 2.40

Comments on the performance of the company:

Fixed Asset Turnover Ratio indicates the level of efficiency of uses or utilizations of Fixed Assets. Here, this Ratio has increased in the year 2014-15 as compared to that of in 2013-14, and, thus, shows a better efficient use or utilization in Fixed Assets in the year 2014-15.

Stock Turnover Ratio is an indicator of the movement of stock. Higher Ratio indicates a faster movement of stock. Here, this Ratio has increased in 2014-15 as compared to that of in 2013-14, and, thus, shows a faster movement of stock in 2014-15 than in 2013-14. Yet, the inventory-holding period of the company is still high. Therefore, this Ratio should be compared with the industry average to draw a final conclusion about the efficiency of the inventory management of the company.

Debt Collection Period indicates the efficiency of the collection department as regards to the collection of credit sales. Here, the Debt Collection Period in 2014-15 is shorter that of in 2013-14, and, thus, reflects a more efficient collection process in 2014-15 than in 2013-14. But, to draw a final conclusion about the efficiency of debtors' management of the company, this Ratio should be compared with the industry average and the credit period received by the company from its creditors.

Debt-Equity Ratio indicates the proportion of debt Capital and Owners' Capital included in the Capital Structure. This is an indicator of the Capital Structure of an enterprise. It also shows the efficiency of the management in financial planning. The ideal ratio is 1:2.

Current ratio indicates whether an enterprise possesses sufficient Current Assets to pay off its Current liabilities. This ratio is an indicator of short-term solvency or liquidity position of an enterprise. Ideal ratio is 2:1.

Working Notes

1. Calculation of Sales including Excise Duty and Sales Tax

	2013-14	2014-15
	₹ in Lakhs	₹ in Lakhs
Sales Excluding Excise Duty and Sales Tax	4,200	5,400
Add: 20% Excise duty and Sales Tax	840	1,080
Sales including Excise Duty & Sales Tax	5,040	6,480

Note: While calculating the Fixed Asset Turnover Ratio and Stock Turnover Ratio, sales excluding excise duty & sales tax is considered. But, while calculating Debtors' Turnover Ratio, sales including excise duty and sales tax is considered as sales to debtors include excise duty and sales tax.

2. Calculation of Average Fixed Asset (Net)

In 2013 -14:

Average Fixed Assets (Net) = (2,000 + 2,150)/2 = ₹2,075 lakhs

In 2014 – 15:

Average Fixed Assets (Net) = (2,150 + 2,200)/2 = ₹2,175 lakhs

3. Calculation of Average Stock

In 2013 – 14:

Average Stock = (1,900 + 2,050)/2 = 1,975 lakhs

In 2014 – 15:

Average Stock = (2,050 + 2,700)/2 = 2,375 lakhs

4. Calculation of Average Receivables

In 2013-14

Average Receivables = (1,800 + 1,950)/2 = 1,875 lakhs

In 2014-15

Average Receivable = (1,950 + 2,150)/2 = 2,050 lakhs

5. Debtors' Turnover Ratio in term of number of days

We know, Debtors' Turnover Ratio = $\frac{\text{Credit sales}}{\text{Average Receivables}}$

Here, Debtors' Turnover Ratio in terms of number of days = Average Collection Period

$$= \frac{\text{No. of days in a year}}{\text{Debtors turnover Ratio}} = \frac{\text{No. of days in a year}}{\text{Credit sales} \div \text{Average Receivable}}$$

$$= \frac{\text{Average Receivables}}{\text{Credit Sales}} \text{ x No. of days in the year}$$

6. Debt/ Equity ratio

Debt = Long term loan

In 2013-14 = 1,550 lakhs

In 2014-15 = 2,600 lakhs

Equity = Equity share capital + Reserve & Surplus

In 2013 -14 = 2,200 + 2,000 + 2,100 = 6,300 lakhs

In 2014 -15 = 3,200 + 700 + 1,900 = 5,800 lakhs

(b) Following are the summarized accounts of Usha Ltd and Sandhya Ltd for the 2 years 2014 and 2015:

Particulars	₹ in Lakhs			
	Usha Ltd		Sandhya Ltd	
	2014	2015	2014	2015
Sales	10,824	9,150	3,504	2,894
Manufacturing & Other Expenses	10,208	8,712	2,992	2,364
Depreciation	112	102	120	70
Profit before Tax	504	336	392	460
	10,824	9,150	3,504	2,894
Miscellaneous Expenditure	330	338	-	-
Fixed Assets	1,672	1,882	702	550
Stock	2,248	2,438	354	452
Debtors	1,456	1,648	1,164	804
Bank	186	66	928	492
	5,892	6,372	3,148	2,298
Creditors	1,894	1,852	466	350
Taxation [Less Advance Tax]	112	136	174	116
Short-term Borrowings	848	1,600	928	432
Long-term Borrowings	508	420	20	-
Capital & Reserves	2,530	2,364	1,560	1,400
	5,892	6,372	3,148	2,298

You are required to:

i. **Indicate and calculate five Ratios which in your opinion are relevant in determining the stability of the two companies.**

ii. **Compare the Ratios so determined for the two companies. Indicate what conclusions can be drawn therefrom? (10 Marks)**

Answer:

In our opinion, the following five Ratios are very much relevant in determining the stability of the given two companies as growing concerns:

Computation of five Relevant Ratios in determining the stability of two companies

	Usha Ltd		Sandhya Ltd	
	2014	2015	2014	2015
(i) Current Ratio $\frac{\text{CAs}}{\text{CLs}}$	3,890÷ 2,854 = 1.36	4,152 ÷ 3,588 = 1.16	2,446 ÷1,568 =1.56	1,748 ÷ 898 = 1.95
(ii) Total Debts to Net Worth $\left[\frac{Total\ \ Outside\ \ Liabilities}{Net\ Worth}\right]$	3,362 ÷ 2,200 = 1.528	4,008 ÷ 2,026 = 1.978	1,588 ÷1,560 =1.017	898 ÷ 1,400 = 0.641
(iii) Total Asset Turnover ratio$[\frac{Turnover}{Total\ \ Assets}]$	10,824 ÷ 5,562 = 1.946	9,150 ÷ 6,034 = 1.516	3,504 ÷3,148 =1.113	2,894÷ 2,298 = 1.259
(iv) ROI $\left[\frac{PBT}{Total\ \ Assets} \text{ x } 100\right]$	504 ÷ 5,562 = 0.091	336 ÷ 6,034 = 0.055	392 ÷3148 =0.124	460 ÷2,298 = 0.20
(v) Liquid Assets to Operating Expenses [excluding Depreciation] per day	1,642 ÷ 27.89 = 59	1,714 ÷ 23.87 = 72	2,092 ÷ 8.20 = 255	1,296÷ 6.48 = 200

From the different Ratios as calculated in (i) above, it has been observed that the results of Sandhya Ltd for the year 2015 were better than that of Usha Ltd. for 2014. On the other hand, the results of Usha Ltd. for the year 2015 were weaker than that of for 2014. Short-term liquidity of solvency Ratios (i.e., Current Ratio and Liquid Assets to Operating-expenses Ratio) of Sandhya Ltd were improved in 2015 than 2014, whereas these Ratios of Usha Ltd were deteriorated in 2015 than it was in 2014. Sandhya Ltd had improved its long-term solvency Ratios (i.e., Total debts to Net Worth and Total Asset Turnover Ratio) in 2015 than in 2014, whereas these Ratios were also deteriorated in 2015 than in 2014 in the case of Usha Ltd. As far as profitability was concerned, Sandhya Ltd had remarkably increased its ROI in 2015 than it was in 2014, whereas ROI of Usha Ltd was remarkably declined in 2015 than 2014.

Therefore, Ratios as computed in the above as showing as stronger position in 2015 as compared to 2014 in the case of Sandhya Ltd, whereas they are showing a deterioration position in 2015 as compared to 2014 in the case of Usha Ltd.

Working Notes:

1. Net Worth	**₹ In Lakhs**			
	Usha Ltd		**Sandhya Ltd**	
	2014	**2015**	**2014**	**2015**
Capital & Reserves	2,530	2,364	1,560	1,400

Less :	Miscellaneous Expenditure	330	338	-	-
	Net Worth	2,200	2,026	1,560	1,400

2. Total Outside Liabilities	**₹ In Lakhs**			
	Usha Ltd		**Sandhya Ltd**	
	2014	**2015**	**2014**	**2015**
Long-term Borrowings	508	420	20	-
Short-term Borrowings	848	1600	928	432
Creditors	1894	1852	466	350
Taxation [Less Advance Tax]	112	136	174	116
Total outside Liabilities	3,362	4,008	1,588	898
3. Current Assets				
Stock	2,248	2,438	354	452
Debtors	1,456	1,648	1,164	804
Bank	186	66	928	492
Current Assets	3,890	4,152	2,446	1,748
4. Current Liabilities				
Creditors	1,894	1,852	466	350
Taxation [less Advance Tax]	112	136	174	116
Short-term Borrowings	848	1,600	928	432
Current Liabilities	2,854	3,588	1,568	898
5. Total Assets				
Fixed Assets	1,672	1,882	702	550
Current Assets [as computed in (3) above]	3,890	4,152	2,446	1,748
Total Assets	5,562	6,034	3,148	2,298
6. Liquid Assets				
Current Assets [as computed in (3) above]	3,890	4,152	2,446	1,748
Less : Stock	2,248	2,438	354	452
Liquid Assets	1,642	1,714	2,092	1,296
7. Operating Expenses (excluding Depreciation) per day				
	10,208/366 =27.89	8,712/365 =23.87	2,992/366 =8.17	2,364/365 =6.48

(c) ICML Ltd has the following Balance Sheets as on 31 March 2015 and 31 March 2014:

Particulars	₹ in lakhs	
	31 March 2015	31 March 2014
Sources of Funds:		
Shareholder's Fund	2,677	1,772
Loan Funds	3,470	2,983
	6,147	4,755
Applications of Funds:		
Fixed Assets	3,566	3,000
Cash & Bank	389	370
Debtors	1,895	1,568
Stock	2,667	2,207
Other Current Assets	1,667	1,504
Less: Current Liabilities	(4,037)	(3,894)
	6,147	4,755

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

	₹ in lakhs	
	31 March 2015	31 March 2014
Sales	24,265	14,982
Less: CGS	22,960	13,644
GP	1,305	1,338
Less: Selling, General & Administrative Expenses	1,035	652
Earnings before Interest and Tax (EBIT)	270	686
Less: Interest Expense	113	105
Profit before tax	157	581
Less: Tax	23	192
Profit after Tax	134	389

Required:

(i) ***Calculate for the year 2014-15:***

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 ICML Ltd. (10 Marks)

Answer:

i. a . Inventory Turnover Ratio (for the year 2014-15) = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \frac{22{,}960}{2{,}437} = 9.42$

b. Return on Net Worth (for the year 2014-15)= $\frac{\text{Profit after tax}}{\text{Net Worth}} = \frac{134}{2{,}677} = 5\%$

Net Worth = Shareholder's Fund

c. ROI (for the year 2014-15) = $\frac{\text{Net Profit before Interest but after tax}}{\text{Average Capital Employed}} \text{x}100$

$= \frac{247}{5{,}451} \text{x}100 = 4.53\%$

Net Profit before interest but after tax = 134 + 113 = 247

Average Capital Employed = Average of Opening and closing of Net Current Assets + Average of Opening and closing of Net Current Assets

= (6,147 + 4,755)/2 = 5,451

d. ROE (for the year 2014-15) = $\frac{\text{Net Profit available to Equity Shareholders}}{\text{Average Equity Shareholders' Fund}} \text{x}100$

$= \frac{134}{(2{,}677 + 1{,}772)/2} \text{x}100 = 6.02\%$

e. Profitability ratio (for the year 2014-15) –

(i) Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Sales}} \text{x}100 = \frac{1{,}305}{24{,}265} \text{x}100 = 5.38\%$

(ii) Operating Profit Ratio = $\frac{\text{Operating Profit}}{\text{Sales}} \text{x}100 = \frac{157 + 113}{24{,}265} \text{x}100 = 1.11\%$

(iii) Net Profit Ration = $\frac{\text{Profit before tax}}{\text{Sales}} \text{x}100 = \frac{157}{24{,}265} \text{x}100 = 0.65\%$

ii. Profitability of operation of the company remarkably decline from ₹686 (₹ in Lakh to ₹270 (₹ in Lakhs), due to a huge increase in the operating expenses during the year 2014-15. NP of the company also reduces due to an increase in the interest expenses. During the year 2014-15, 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 2014-15, 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 2014-15.