

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) In the Annexure to the Cost Audit (Report) Rules, 2011 details of production and percentage of production to installed capacity has to be given. How do you go about ascertaining:

(A) Installed Capacity

(B) Actual production.

(ii) In a Company manufacturing Electric motors, you notice that the licensed and installed capacity indicated in numbers in the Annual Audited Accounts of the Company.

Would you as Cost Auditor of the Company for the Electric Motors accept this capacity as production? If not, why? How would you present it as per requirements of Cost Audit (report) Rules. Illustrate with an example. (8+4 = 12 Marks)

Answer.

(i) (A) Installed Capacity

The proper determination of installed capacity is of utmost importance and the Cost Audit (Report) Rules, 2011 has clearly brought out his in the note.

Primary source for determination of capacities is the rated capacity of the installed machines as indicated by the machinery supplier. Such capacity is expressed in terms of hourly/daily capacities. In converting this to annual capacities normal holidays, annual maintenance, shutdowns etc. are to be reckoned as well as daily working hours. The annual capacity is arrived at by multiplying rated capacity per hour/day etc. by relevant number of hours/days of working for the year. In plants where shift working is done the relevant shifts considered is also to be indicated while determining installed capacity.

Where different machines are employed, the capacity of each production machine is to be assessed. The capacity will be determined by the capacity of the key limiting factor. In this context, substantial imbalances would also be revealed.

The procedure needs to be modified where the product is not homogenous i.e. where different types/sizes of products are manufactured. In such situations, capacity has to be expressed in

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standard hours, occupancy hour, spindle/looms shifts etc. by which different types of production can equated.

There are situations where even this becomes difficult and simply expressed in terms of standard values at constant prices. There are also situations where capacities are flexible as company has options for in-house manufacture of parts or contracting out or where increase in men could achieve higher production.

(B) Actual Production

Actual daily production records indicating quantities produced by stages, the aggregate weekly and monthly records and the annual sum total thereof would form the basis of verifying production. The internal reporting system of production as such should be sound. These figures have to be cross-checked with stock records maintained for finished goods and components.

Production returns filed to various Govt. Authorities e.g. excise authorities also would be examined and cross-checked with the daily records, stock/records. Some companies have incentive scheme for payment to Workmen based on production and detailed records of production are maintained for this purpose. This also serves as a basis for ascertainment of production. Other cross-checks such as theoretical from input can also be used.

As in the case of capacity ascertainment, a meaningful comparison of production figures can be achieved only if production is assessed in comparable units. This unit need not necessarily be in terms of numbers and can be in terms of Standard Hours/Occupancy Hours, equated production etc.

(ii) Electric Motors come in different sizes depending on the horsepower. The mix of production of the different size also vary from year to year depending on the demand pattern. As such, capacity of production expressed in terms of numbers would be meaningless. To make it meaningful some other yardstick as Standard Production hours or equated production in terms of a single representative model e.g. 5 HP Motors should be used.

An example is given in Tabular statement:

Production Hours — 2 Shift basis 4500 Hours yearly.

Production details (HP)	Standard production hour	Numbers produced	Standard hours of production	Capacity Utilisation
1	1	100	100	(4050/4500) x 100 = 90%
2	1.5	200	300	
3	2	250	500	
5	3	600	1800	
8	4	50	200	
10	5	40	200	
12	6	50	300	
15	6.5	100	650	
			4050	

(iii) What are the key features of Cost Audit?

(3 marks)

Answer:

The cost audit of the companies under the relevant provisions of the Companies Act, 1956 has the following features:

- (a) Assessing compliance of the relevant cost accounting records rules as applicable to the product under review;
- (b) Study of the costing system to assess whether it is adequate for the cost ascertainment of the product under review;
- (c) Evaluation of the operating and other efficiencies of the organization under audit with special reference to the product under review; to ensure the submission of necessary details required under the Cost Audit Report Rules, 2001 as amended from time to time.
- (d) Submission of Cost Audit Report in the format prescribed.

(b) (i) State the applicability and non-applicability of provision of Cost Accounting Record Rules, 2011. Whether this rules is also applicable to Foreign companies in India? (10 Marks)

Answer:

The Cost Accounting Record Rules, 2011, is applicable to every company including a foreign company engaged in production, processing, manufacturing or mining wherein:

- (i) the aggregate value of net worth as on the last date of the immediately preceding financial year exceeds ₹ 5 crores, or
- (ii) the aggregate value of the turnover made by the company from all products or activities during the immediately preceding financial year exceeds ₹ 20 crores, or
- (iii) the company's equity or debt securities are listed or are in the process of listing on any stock exchange.

As per General Circular no. 67/2011, the Cost Accounting Records Rules, 2011 (Common & 6 Industry specific) are not applicable to companies engaged in:

- (i) Wholesale Trading, Retail Trading, Banking, Financial, Leasing, Investment, Insurance, Education, Healthcare, Tourism, Travel, Hospitality, Recreation, Transport Services, Professional Consultancy, IT & IT Enabled Services, Research & Development, Postal/Courier services
- (ii) Job work operations or contracting/ sub-contracting activities and paid only the job work or conversion charges, such as, tailoring, baking, repairing, painting, printing, constructing, servicing, etc.
- (iii) A company yet to commence commercial operations.
- (iv) Ancillary products/activities of companies incidental to their main operations (i.e. products/activities that do not constitute their main line of business)
 - where the total turnover from the sale of each such ancillary products/activities do not exceed 2% of the total turnover of the company or
 - ₹ 20 crores, whichever is lower.
- (v) Required details of all such ancillary products/activities to be maintained under a miscellaneous group and disclosed appropriately.

(ii) State the circumstances under which the companies are required to submit Compliance report instead of Cost Audit Report? (5 Marks)

Answer:

The threshold limit for applicability of any of the Cost Accounting Records Rules is ₹20 crore. In respect of companies coming under the purview of Companies (Cost Accounting Records) Rules 2011, the threshold limit for application of cost audit for specific industries is ₹100 crore. Hence, any company having a turnover between ₹20 crore and ₹100 crore would have to file a Compliance Report. Further, companies engaged in such products/activities not covered under cost audit would also be required to file a compliance report.

(c) (i) What are the steps to be taken by the cost auditor to ensure proper maintenance of cost records? (12 Marks)

Answer:

The following steps can be taken to ensure proper maintenance of cost records:

- (1) Study and examine the chart of accounts with special reference to the system of cost methods adopted by the company.
- (2) Study the basic raw materials and packing materials, chemicals and stores required for the manufacture of the product and their sources.
- (3) Study the organizational structure and know the details of manufacturing process.
- (4) Examine whether cost centres are split-up into production & services functions
- (5) The licensed capacity and installed capacity should be ascertained. Any addition to production capacity during the preceding two years should also be ascertained. It is to be noted that though the reporting in cost audit report is required to be done at a Product Group level, licensed capacity and installed capacity would continue to be ascertained machine wise as it is not feasible to ascertain such capacities at product/product group level.
- (6) Examine the adequacy of internal checks and control.
- (7) Before starting the assignment, meet the various important executives of the company and note down the functions, responsibilities and powers delegated to each.
- (8) Obtain an understanding of the business and the production processes involved, the flow of the process, till the finished goods are packed and transferred to the finished stores for despatch.
- (9) Obtain the Balance Sheets of the company for the past two years and make a note of the important points contained in the Directors' Report to the shareholders on the various financial, operation and technical matters.
- (10) Study the books/records containing production records etc., statistics maintained by the factory(s) in compliance with the Excise and other Government requirements and note down the Licensed and Installed capacities. Ascertain the reasons for shortfall in production, if any, as compared to the previous two years.
- (11) Compare actual production with the installed capacity.
- (12) Prepare a complete quantitative analysis beginning with input materials (both direct and indirect), corresponding production at each stage of production, any by-product or joint products produced, scrap and wastages generated, quantity transferred for captive consumption and the stage from which such transfer is taking place and final reconciliation with that of sales and stocks in respect of each type of product.

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- (13) Study the Cost Accounting System followed by the company. Examine whether the same system is followed in case the Company is engaged in production of different and varied types of products manufactured at different locations and such locations are operating under different autonomous Divisions under the overall management of the Company.
- (14) Make proper identification of various production and service cost centres and check whether the expenditure is initially booked to these cost centres correctly.
- (15) Check whether the relevant cost accounting standards and generally accepted cost accounting principles (GACAP) are being followed for valuation of materials, utilities, overheads etc.
- (16) It is necessary to prepare individual service/utilities cost statements, viz., Water, Steam, Power, DM Water, Purified Air etc. Ensure consumption records of these utilities at various production and service centres properly maintained and allocate the costs on an equitable basis to the various consuming cost centres. In respect of supplies made to or received from other units of the company, ensure that the transfers are made at cost of production/generation of the utilities and that the method followed is consistent. In case of inter unit transfers at pre-determined transfer price in financial accounts, the same has to be reversed for cost accounts and considered at cost.
- (17) Ascertain any abnormal reasons for low productions and/or high usage of services/ utilities and high down time in the plant. Find out whether these have been properly recorded and reported separately.
- (18) Verify whether consistency is maintained with regard to cost accumulation, cost analysis, cost allocation and apportionment, cost treatment and costing procedures adopted for inventory valuation from period to period.
- (19) Examine the records maintained for inter--company transfers.
- (20) Ascertain if any Royalty/Technical Services Fee has been paid to Collaborator/Technology Supplier. If it is one-time lump sum payment, check whether the charge to cost of product is spread over the period for which benefit is to be derived out of the payment and the same is equitable and reasonable.
- (21) Examine whether there is any Royalty agreement and check its effect on cost of production and allocation of the cost to the product.
- (22) Examine the practice followed for maintaining quality of the product and related Quality Control Expenses. Check the amount incurred on quality control, quality audit etc. and their treatment in the cost of product.
- (23) Examine whether the company is complying with the various legal provisions with respect to pollution control and the expenses incurred therefor and whether absorption of such cost in the product is done equitably and consistently.
- (24) Cost of production should be derived for domestic sale and export sale separately.
- (25) Verify the reconciliation statement between the profit/loss as per the cost accounts and as per the financial accounts. Also examine the variations and reasons thereof.
- (26) Examine whether the data maintained in the cost record are reconciled with the relevant returns submitted by the company to government authorities.
- (27) Where a system of standard costing is used, it should be ensured that such costs are converted into actual for the purpose of determining the figures required to comply with the requirements of Cost Accounting Record Rules. The method of adjustment of variances to arrive at the actual cost from the standard cost should be examined.

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- (28) Examine that cost statements have been prepared as per requirements of Cost Accounting Records Rules.
- (29) Examine whether Cost Accounting Standards and Generally Accepted Cost Accounting Principles issued by the Institute of Cost Accountants of India are being followed.
- (30) Examine whether there are any abnormal features affecting production during the year, e.g., strikes, lock-outs, major breakdowns in the plant, substantial power cuts, serious accidents, etc., and what is their impact on the cost of production.
- (31) Examine if there are any special expenses, which have been directly allocated to products under reference, and what is the total amount as also the incidence per unit of product.

(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

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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) What are the duties of Board of Directors regarding Compliance Report? (5 Marks)

Answer:

Duties of Board of Directors regarding Compliance Report:

The Compliance Report as prescribed in the Rules is divided into different parts.

- (i) Form A, Part I contains general information regarding the company and details of cost accountant.
- (ii) Form A, Part II contains attachment of Compliance Report including annexure and verification by the company.
- (iii) Form B contains the Compliance Report to be certified by the cost accountant and annexure to Compliance Report to be authenticated by the cost accountant.

As per the Rules, the Annexure to the Compliance Report is to be approved by the Board of Directors. However, the Compliance Report, being a report of the cost accountant, is not to be approved by the Board of Directors.

(e)(ii) Explain the procedure for appointment of cost auditor. (10 Marks)

Answer:

Procedure for appointment of cost auditor

The Cost Audit Branch of The Ministry of Corporate Affairs vide General Circular No. 15/2011 dated 11th April 2011 has set out the procedure for appointment of Cost Auditor. The revised procedure has been made effective from the financial year commencing on or after the 1st day of April, 2011.

- i) The company required to get its cost records audited u/s 233B(1) of the Companies Act, 1956 shall appoint Cost Auditor as defined Cost Accountant as defined in clause (b) of sub-section (1) of section 2 of the Cost and Works Accountants Act, 1959 and who holds a valid certificate of practice under sub-section (1) of section 6 of that Act and including a Firm of Cost Accountants . However, the cost accountant or partners of a firm of cost accountant should be in whole-time practice and not holding any other employment.
- ii) Under the revised procedure, the first point of reference will be the Audit Committee to ensure that the cost auditor is free from any disqualification as specified under section 233B(5) read with section 224 and sub-section (3) or sub-section (4) of section 226 of the Companies Act, 1956. The Audit Committee should also ensure that the cost auditor is independent and is at arm's length relationship with the company. After ascertaining the eligibility, the Audit Committee will recommend to the Board of Directors for appointment of the Cost Auditor.

In those companies where constitution of an Audit Committee is not required by law, the functions of the "Audit Committee" as per the procedure will be discharged by the "Board of Directors".

- iii) The cost auditor will be required to give a separate certificate to the audit committee in respect to his/its independence and arm's length relationship with the company.
- iv) The Company is required to e-file its application with the Central Government on www.mca.gov.in portal, in the prescribed Form 23C within ninety (90) days from the date of commencement of each financial year, along with the prescribed fee as per the Companies (Fees on Application) Rules, 1999 as amended from time to time and other documents as per existing practice i.e.

(a) certified copy of the Board Resolution proposing appointment of cost auditor; and

- (b) copy of the certificate obtained from the cost auditor regarding compliance of section 224(1-B) of the Companies Act, 1956.
- v) After filing the online application by the Company, the same shall be deemed to be approved by the Central Government, unless contrary is heard within thirty (30) days from the date of filing such application.
- However, if within thirty (30) days from the date of filing such application, the Central Government directs the Company to re-submit the said application with such additional information or explanation, as may be specified in that direction, the period of thirty days for deemed approval of the Central Government will be counted from the date of re-submission of Form 23C by the Company.
- vi) After obtaining approval of the Central Government (deemed or otherwise), the Company will be required to issue a formal letter of appointment to the cost auditor.
- vii) The Cost Auditor is required to inform the Central Government within thirty days of receipt of formal letter of appointment from the Company. Such intimation is required to be done in prescribed e-Form 23 D along with a copy of such appointment.
- viii) The Company is required to disclose full particulars of the cost auditor along with the due date and actual date of filing of the Cost Audit Report by the cost auditor, in its Annual Report for each relevant financial year. Since the notification has made effective from April 1, 2011, companies under cost audit are required to furnish the details in its Annual Report from the financial year 2010-11.

(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 organization for budgetary control. The budgetary control organization 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 curbing 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 Sun Ltd for the last 3 years read as follows:

	₹ in lakhs		
	As on 31 March 2012	As on 31 March 2013	As on 31 March 2014
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 2012-13 and 2013-14:
 - 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 ration for the year 2012-13 & 2013-14

	2012-13	2013-14
(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 2013-14 as compared to that of in 2012-13, and, thus, shows a better efficient use or utilization in Fixed Assets in the year 2013-14.

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 2013-14 as compared to that of in 2012-13, and, thus, shows a faster movement of stock in 2013-14 than in 2012-13. 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 2013-14 is shorter that of in 2012-13, and, thus, reflects a more efficient collection process in 2013-14 than in 2012-13. 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.

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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

	2012-13	2013-14
	₹ 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 2012 -13:

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

In 2013 – 14:

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

3. Calculation of Average Stock

In 2012 – 13:

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

In 2013 – 14:

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

4. Calculation of Average Receivables

In 2012-13

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

In 2013-14

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

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

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

6. Debt/ Equity ratio

Debt = Long term loan

In 2012-13 = 1,550 lakhs

In 2013-14 = 2,600 lakhs

Equity = Equity share capital + Reserve & Surplus

In 2012 -13 = 2,200 + 2,000 + 2,100 = 6,300 lakhs

In 2013 -14 = 3,200 + 700 + 1,900 = 5,800 lakhs

(b) Following are the summarized accounts of Kayal Ltd and Sonu Ltd for the 2 years 2012 and 2013:

Particulars	₹ in Lakhs			
	Kayal Ltd		Sonu Ltd	
	2012	2013	2012	2013
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	-

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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

	Kayal Ltd		Sonu Ltd	
	2012	2013	2012	2013
(i) Current Ratio $\frac{CAs}{CLs}$	$3,890 \div 2,854$ = 1.36	$4,152 \div 3,588$ = 1.16	$2,446 \div 1,568$ = 1.56	$1,748 \div 898$ = 1.95
(ii) Total Debts to Net Worth $\left[\frac{\text{Total Outside Liabilities}}{\text{Net Worth}} \right]$	$3,362 \div 2,200$ = 1.528	$4,008 \div 2,026$ = 1.978	$1,588 \div 1,560$ = 1.017	$898 \div 1,400$ = 0.641
(iii) Total Asset Turnover ratio $\left[\frac{\text{Turnover}}{\text{Total Assets}} \right]$	$10,824 \div 5,562$ = 1.946	$9,150 \div 6,034$ = 1.516	$3,504 \div 3,148$ = 1.113	$2,894 \div 2,298$ = 1.259
(iv) ROI $\left[\frac{PBT}{\text{Total Assets}} \times 100 \right]$	$504 \div 5,562$ = 0.091	$336 \div 6,034$ = 0.055	$392 \div 3,148$ = 0.124	$460 \div 2,298$ = 0.20
(v) Liquid Assets to Operating Expenses [excluding Depreciation] per day	$1,642 \div 27.89$ = 59	$1,714 \div 23.87$ = 72	$2,092 \div 8.20$ = 255	$1,296 \div 6.48$ = 200

From the different Ratios as calculated in (i) above, it has been observed that the results of Sonu Ltd for the year 2013 were better than that of Kayal Ltd. for 2012. On the other hand, the results of Kayal Ltd. for the year 2013 were weaker than that of for 2012. Short-term liquidity of solvency Ratios (i.e., Current Ratio and Liquid Assets to Operating-expenses Ratio) of Sonu Ltd were improved in 2013 than 2012, whereas these Ratios of Kayal Ltd were deteriorated in 2013 than it was in 2012. Sonu Ltd had improved its long-term solvency Ratios (i.e., Total debts to Net Worth and Total Asset Turnover Ratio) in 2013 than in 2012, whereas these Ratios were also deteriorated in 2013 than in 2012 in the case of Kayal Ltd. As far as profitability was concerned, Sonu Ltd had

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remarkably increased its ROI in 2013 than it was in 2012, whereas ROI of Kayal Ltd was remarkably declined in 2013 than 2012.

Therefore, Ratios as computed in the above as showing as stronger position in 2013 as compared to 2012 in the case of Sonu Ltd, whereas they are showing a deterioration position in 2013 as compared to 2012 in the case of Kayal Ltd.

Working Notes:

1. Net Worth	₹ In Lakhs			
	Kayal Ltd		Sonu Ltd	
	2012	2013	2012	2013
Capital & Reserves	2,530	2,364	1,560	1,400
Less : Miscellaneous Expenditure	330	338	-	-
<i>Net Worth</i>	2,200	2,026	1,560	1,400

2. Total Outside Liabilities	₹ In Lakhs			
	Kayal Ltd		Sonu Ltd	
	2012	2013	2012	2013
Long-term Borrowings	508	420	20	-
Short-term Borrowings	848	1,600	928	432
Creditors	1,894	1,852	466	350
Taxation [Less Advance Tax]	112	136	174	116
<i>Total outside Liabilities</i>	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
<i>Current Assets</i>	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
<i>Current Liabilities</i>	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
<i>Total Assets</i>	5,562	6,034	3,148	2,298

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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
<i>Liquid Assets</i>	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
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(c) Poly Ltd has the following Balance Sheets as on 31 March 2014 and 31 March 2013:

Particulars	₹ in lakhs	
	31 March 2014	31 March 2013
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

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

	₹ in lakhs	
	31 March 2014	31 March 2013
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 2013-14:

- 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.

(10 Marks)

(This question has revised)

Answer:

i. a. Inventory Turnover Ratio (for the year 2013-14) = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \frac{22,960}{2,437} = 9.42$

b. Return on Net Worth (for the year 2013-14) = $\frac{\text{Profit after tax}}{\text{Net Worth}} = \frac{134}{2,677} = 5\%$

Net Worth = Shareholder's Fund

c. ROI (for the year 2013-14) = $\frac{\text{Net Profit before Interest but after tax}}{\text{Average Capital Employed}} \times 100$
 $= \frac{247}{5,451} \times 100 = 4.53\%$

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

Average Capital Employed = $\frac{\text{Average of Opening and closing of Net Current Assets} + \text{Average of Opening and closing of Net Current Assets}}{2}$
 $= \frac{(6,147 + 4,755)}{2} = 5,451$

d. ROE (for the year 2013-14) = $\frac{\text{Net Profit available to Equity Shareholders}}{\text{Average Equity Shareholders' Fund}} \times 100$

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

e. Profitability ratio (for the year 2013-14) –

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

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

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

- 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 2013-14. NP of the company also reduces due to an increase in the interest expenses. During the year 2013-14, 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 2013-14, 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 2013-14.