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) State the meaning of Captive Consumption. What types of goods covered under CAS-4? **[5]**

Answer:

Meaning of Captive Consumption:

"Captive Consumption" means that the goods are not sold by the assessee but are used for consumption by him or on his behalf in the production or manufacture of other articles in the same premises or elsewhere.

When goods manufactured are supplied to a related party who does not sell the goods but consumes the same in manufacture of another product(s), such goods are also deemed to be "captively consumed" for the purpose of valuation under Excise Laws.

In some cases during the manufacture, certain intermediate goods emerge and are used in manufacture/production of other goods. The use of such intermediate product within the factory is also termed as "Captive Consumption".

Sometimes the goods are not removed from the factory but are used in the further manufacture/production of goods and in such cases also, duty is payable as soon as the goods are manufactured/produced within the factory unless exempted. Goods captively consumed in the same factory of the manufacturer are exempted from duty as per Notification No. 67/95-CE dt.16.03.1995, if duty is payable on the final product. For example, the manufacturer of motor vehicles manufactures various parts of the motor vehicles like brakes, panels etc. These parts are also excisable goods and have separate entry in the schedule to Central Excise Tariff Act, 1985. If these parts are removed from the factory, duty is payable but if these parts are used in the same factory of the manufacturer in the assembly / further manufacture of motor vehicles then the use of parts and components is called as captive consumption, and is not subject to excise duty in view of above notification.

Type of Goods:

Following type of goods are covered under CAS-4:

1. Goods manufactured not sold but captively consumed.

2. Goods manufactured partly sold and partly captively consumed.

3. Goods manufactured sold to related party for captive consumption.

(a)(ii) As a Cost Auditor of a company how would you dealt with treat the -

(I) Head office expenses of a company;

(II) Treatment of Joint Products and By-Products. [5+5= 10]

Answer:

(I) Treatment of Head Office/Corporate Office Expenses:

A company may have a number of factories with a head office. In a multi-locational/ multi-product company, there are common activities carried out at Head Office like purchase, inventory management, finance, personnel, R & D, Quality Assurance, security etc. These activities sometimes, are centralized at one place i.e. Head Office for business convenience and scale of economy and booked as head office expenses along with other activities like secretarial, project, treasury, investment, trading, etc. They do not form part of the Administration overheads. For example: Industrial relation Department; Material management; Operation/production planning Department; Human Resources, System Design & Development Set Up and the like are production related activities. Nomenclature or place where the activity takes place is not relevant. In such a situation, activities at Head Office/Corporate level are to be clearly demarcated and segregated so as to distinguish activities that contribute clearly and directly to production activities from general management and administration activities. It is necessary to properly analyze the expenses of such activities of head office and allocate these to plants/products on rational basis.

(II) Treatment of Joint Products and By-Products

In case joint products are produced, joint costs are allocated between the products on a rational and consistent basis. In case by-products are produced, the net realisable value of by-products is credited to the cost of production of the main product.

For allocation of joint cost to joint products, the sales values of products at the split off point i.e. when the products become separately identifiable may be the basis. It may be allocated based on a measure of the number of units, weight or volume. Some other basis may be adopted. For example, in case of petroleum products, each product is assigned certain value based on its certain properties, may be calorific value and these values become the basis of apportionment of joint cost among petroleum products.

The joint cost shall be allocated to the cost of production of Joint Products as per the generally accepted cost accounting principles.

By-product:

It is difficult to determine the cost of by-product. By products are sold:

(1) Either in original form without further processing; or

(2) or processed in order to be saleable. In such case, the main product is credited with the sale realization (gross/net) as the case may be. In other words expenses incurred to bring

by-product to marketable conditions shall be adjusted from the sale of by product and net realizable value of by-product shall be credited to cost of production of main product.

In case sale realization is not available, credit to main product at substitute value of by product may be given.

(b)(i) VRC Ltd. has its own power plant, which has two users, Cutting Department and Welding Department. When the plans were prepared for the power plant, top management decided that its practical capacity should be 1,50,000 machine hours. Annual budgeted practical capacity fixed costs are ₹9,00,000 and budgeted variable costs are ₹4 per machine-hour. The following data are available:

	Cutting Department	Welding Department	Total
Actual Usage in 2013-14 (Machine hours)	**60,000**	**40,000**	**1,00,000**
Practical capacity for each department (Machine hours)	**90,000**	**60,000**	**1,50,000**

Required:

(i) Allocate the power plant's cost to the cutting and the welding department using a single rate method in which the budgeted rate is calculated using practical capacity and costs are allocated based on actual usage.

(ii) Allocate the power plant's-cost to the cutting and welding departments, using the dual – rate method in which fixed costs are allocated based on practical capacity and variable costs are allocated based on actual usage.

(iii) Allocate the power plant's cost to the cutting and welding departments using the dual-rate method in which the fixed-cost rate is calculated using practical capacity, but fixed costs are allocated to the cutting and welding department based on actual usage. Variable costs are allocated based on actual usage.

(iv) Comment on your results in requirements (i), (ii) and (iii). **[10]**

Solution:

(a) Working notes:

1. Fixed practical capacity cost per machine hour:

Practical capacity (machine hours)	1,50,000
Practical capacity fixed costs (₹)	9,00,000
Fixed practical capacity cost per machine hour (₹9,00,000/1,50,000 hours)	₹ 6

2. Budgeted rate per machine hour (using practical capacity):

= Fixed practical capacity cost per machine hour + Budgeted variable cost per machine hour

= ₹6 + ₹4 = ₹10

(i) Statement showing Power Plant's cost allocation to the Cutting & Welding departments by using single rate method on actual usage of machine hours

	Cutting Department	Welding Department	Total
Power plants cost allocation by using actual usage (machine hours) (Refer to working note 2)	6,00,000 (60,000 hours × ₹ 10)	4,00,000 (40,000 hours × ₹ 10)	10,00,000

(ii) Statement showing Power Plant's cost allocation to the Cutting & Welding departments by using dual rate method

	Cutting Department	Welding Department	Total
Fixed cost (Allocated on practical capacity for each department i.e.): (90,000 hours: 60,000 hours)	5,40,000 (₹9,00,000 × 3/5)	3,60,000 (₹9,00,000 × 2/5)	9,00,000
Variable cost (Based on actual usage of Machine hours)	2,40,000 (60,000 hours × ₹4)	1,60,000 (40,000 hours × ₹4)	4,00,000
Total cost	7,80,000	5,20,000	13,00,000

(iii) Statement showing power plant's cost allocation to the cutting & Welding departments using dual rate method

	Cutting Department	Welding Department	Total
Fixed cost (Allocation of fixed cost on actual usage basis (Refer to working note 1)	3,60,000 (₹60,000 × 6)	2,40,000 (₹40,000 × 6)	6,00,000
Variable cost (Based on actual usage)	2,40,000 (60,000 hours × ₹4)	1,60,000 (40,000 hours × ₹4)	4,00,000
Total cost	6,00,000	4,00,000	10,00,000

(iv) Comments:

Under dual rate method, under (iii) and single rate method under (i), the allocation of fixed cost of practical capacity of plant over each department *are* based on single rate. The major advantage of this approach is that the user departments *are* allocated fixed capacity costs only for the capacity used. The unused capacity cost ₹ 3,00,000 (₹ 9,00,000 - ₹ 6,00,000) will not be allocated to the user departments. This highlights the cost of unused capacity. Under (ii) fixed cost of capacity *are* allocated to operating departments on the basis of practical capacity, so all fixed costs *are* allocated and there is no unused capacity identified with the power plant.

(b)(ii) Basic pay ₹5,00,000; Lease rent paid for accommodation provided to an employee ₹2,00,000, amount recovered from employee ₹40,000, Employer's Contribution to P.F. ₹75,000, Employee's Contribution to P.F. ₹75,000; Reimbursement of Medical expenses ₹67,000, Hospitalisation expenses of employee's family member borne by the employer ₹19,000, Festival Bonus ₹30,000, Festival Advance ₹30,000. Compute the Employee cost. **[5]**

Solution:

Computation of Employee Cost

Particulars		**Amount (₹)**
	Basic Pay	5,00,000
Add	Net cost to employer towards lease rent paid for accommodation provided to an employee [= lease rent paid less amount recovered from employee] = [2,00,000 (-) 40,000]	1,60,000
Add	Employer's Contribution to PF	75,000
Add	Reimbursement of Medical Expenses	67,000
Add	Hospitalisation expenses of employee's family member paid by the employer	19,000
Add	Festival Bonus	30,000
	Employee Cost	**8,51,000**

Note:

(i) Festival advance is a recoverable amount, hence not included in employee cost.

(ii) Employee's contribution to PF is not a cost to the employer, hence not considered.

(c) How would you deal the following items in the cost accounts of a manufacturing concern?

(i) Research and Development Cost;
(ii) Packing Expenses;
(iii) Fringe Benefits;
(iv) Expenses on Removal and Re-erection of Machinery;
(v) Training Costs. **[3×5=15]**

Answer:

(i) Research and Development Cost:

Research and Development Cost is the cost/expense incurred for searching new or improved products, production method's/techniques or plants/equipments. Research Cost may be incurred for carrying basic or applied research. Both basic and applied research relates to original investigations to gain from new scientific or technical knowledge and understanding, which is not directed towards any specific practical aim (under basic research) and is directed towards a specific practical aim or objective (under applied research).

Treatment in Cost Accounts

Cost of Basic Research (if it is a continuous activity) shall be charged to the revenues of the concern. It may be spread over a number of years if research is not a continuous activity and amount is large.

Cost of applied research, if relates to all existing products and methods of production then it should be treated as a manufacturing overhead of the period during which it has been incurred and absorbed. Such costs are directly charged to the product, if it is solely incurred for it.

It applied research is conducted for searching new products or methods of production etc., then the research costs treatment depends upon the outcome of such research. For example, if research findings are expected to produce future benefits or if it appears that such findings are going to result in failure then the costs incurred may be amortised by charging to the Costing Profit and Loss Account of one or more years depending upon the size of expenditure. If research proves successful, then such costs will be charged to the concerned product.

Development Costs, begins with the implementation of the decision to produce a new or improved product or to employ a new or improved method. The treatment of development expenses is same as that of applied research.

(ii) Packing Expenses:

It includes the expenses incurred on wrapping, tying, bottles, boxes, containers or bags etc. In

Cost Accounts they are treated as follows:

(i) It is treated as a direct material cost in the case of those products which cannot be sold without the use of a packing. For example Ink-pot; Bread; Paste etc.

(ii) It may be treated as distribution overhead if packing expenses are incurred, to facilitate the transportation of finished products.

(iii) It may be treated as advertisement cost and included in selling overheads if it is incurred for advertisement to make the product attractive.

(iii) Fringe Benefits:

Additional benefits paid to the employees of a concern and are not related to the direct efforts of the employees, are called fringe benefits. They include holiday pay; leave pay; employer's contribution to provident fund; gratuity and pension schemes; slate insurance; medical benefits; subsidised canteen facility etc.

Expenditure incurred on fringe benefits in the case of factory workers should be treated as factory overheads and are apportioned among all the production and service departments on the basis of the number of workers in each department.

Fringe benefits to office and selling and distribution staff should be treated as administration and selling and distribution overheads respectively and are recovered accordingly.

(iv) Expenses on Removal and Re-erection of Machinery:

Expenses are sometime incurred on removal and re-erection of machinery in factories. Such expenses may be incurred due to factors like change in the method of production, an addition or alteration in the factory building, change in the flow of production, etc. All such expenses are treated as production overheads. When amount of such expenses is large, it may be spread over a period of time.

If such expenses are incurred due to faulty planning or some other abnormal factor, then they may be charged to Cost Profit and Loss Account.

(v) Training Costs:

These costs comprises of — wages and salaries of the trainees or learners, pay and allowances of the training and teaching staff, payment of fees etc. for training or for attending courses of studies sponsored by outside agencies and cost of materials, tools and equipments used for training, costs incurred for running the training department, the losses arising due to the initial lower production, extra spoilage etc. occurring while providing training facilities to the new recruits.

All these costs are booked under separate standing order numbers for the various functions. Usually there is a service cost centre, known as the Training Section, to which all the training costs are allocated. The total cost of training section is thereafter apportioned to production centres.

(d)(i) Explain the procedures for issue of Cost Accounting Standard (CAS). [10]

Answer:

(i) Procedure for issuing the Standards

The following procedure is adopted for formulating and issuing the Standards:

I. Proposals to develop new Standards or revise the existing ones, are identified by the CAASB based on the national and international developments, inputs from members of the Council of the Institute, CAASB members, members of other committees of the Institute, members of the Institute and/or recommendations received from the Government, regulators, industry associations, or other interest groups.

II. CAASB determines the priorities of various proposals on hand for the development of the Standards.

III. CAASB constitutes separate Task Force or Study Group to develop preliminary draft of each Standard based on appropriate research and consultation with all interest groups, other professionals and regulators. The Task Force / Study Group also consider relevant pronouncements issued by the IFAC, if any.

IV. The preliminary draft Standard prepared by the Task Force / Study Group is considered by the CAASB with inputs from the Technical Directorate. After a para by para discussion, CAASB either clears the draft Standard, with or without any modifications or refers the same to the Task Force / Study Group for revision based on the deliberations of the CAASB.

V. In case the preliminary draft Standard is re-drafted by the Task Force / Study Group, the revised draft is again considered by the CAASB with inputs from the Technical Directorate. Based on the discussions held, CAASB clears the draft Standard. This is then issued as an Exposure Draft under the authority of the CAASB.

VI. Each Standard generally follows the following structure. In case of deviation, suitable explanation is provided by the Task Force / Study Group preparing the Standard.

   1. Introduction
   2. Objectives of issuing the standard
   3. Scope of the standard
   4. Definitions and explanations of the terms used in the standard
   5. Requirements
   6. Application and other explanatory material
   7. Effective date

VII. Exposure draft of the Standard is hosted on the website of the Institute and published in Management Accountant journal for comments of stakeholders and public at large Copies of the Exposure Draft are sent to the members of the Central Council, Past Presidents, members of the Regional Councils & Chapters and circulated among other bodies for their comments. Exposure Draft is also sent to the following bodies:

i. Ministry of Corporate Affairs, Government of India

ii. Comptroller and Auditor General of India

iii. Reserve Bank of India

iv. Central Board of Direct Taxes

v. Central Board of Excise and Customs

vi. Securities and Exchange Board of India

vii. Institute of Chartered Accountants of India

viii. Institute of Company Secretaries of India

ix. Industry Associations such as CII, FICCI, ASSOCHAM and PHDCCI

x. Concerned regulators or any other body considered relevant by the CAASB keeping in view the nature and requirements of the Standard.

VIII. To allow adequate time for due consideration and comment from all interested parties, exposure period is of minimum 45 days or higher as decided by the CAASB.

IX. The comments and suggestions received within the exposure draft period are read and considered by the CAASB. Outcome of each comment / suggestion is recorded in the minutes of the relevant CAASB meeting.

X. After taking into consideration the comments received, the draft of the proposed Standard is finalised by the CAASB and submitted to the Council of the Institute for its consideration and approval.

XI. The Council of the Institute considers the final draft of the proposed Standard, and if found necessary, modifies the same in consultation with the CAASB. The concerned Standard is then issued under the authority of the Council of the Institute.

XII. The effective date of implementation of the Standard is decided by the Council of the Institute in consultation with the CAASB. No Standard will have retrospective application unless otherwise stated.

(d)(ii) Whether finance costs incurred in connection with the acquisition of materials shall form part of material cost? [5]

Answer:

Finance costs incurred in connection with the acquisition of materials shall not form part of material cost.

Finance costs are interest and the like, on borrowed funds. Finance costs are excluded from cost of material. The letter of credit charges are for credit risk or a transaction risk (demand bill) and are part of bank charges which form part of administrative overheads.

Sometimes goods are kept in bonded warehouse and clearance of goods is delayed. This may happen due to any financial stringency delaying the payment to the bank. Such payments of storage are to be excluded from cost of material calculation and are dealt with in the financial accounts.

(e)(i) State the needs & elements of planning in a Cost Audit? [5]

Answer:

Planning and Structuring the Cost Audit

Need for Planning an Audit.

The Cost Auditor should always plan to conduct an effective cost audit in an efficient and timely manner. This is very necessary to attain objectives of the cost audit. Audit plan for new client will be generally more detailed than in case of a repeat audit. In case of new audit, the cost auditor has to collect all information about the company like nature of business, organization structure, key personnel, accounting system etc. Similarly, he has to also collect information about other peers in the industry, nature of problems etc. The details required shall be much less in case of a repeat audit. The proper planning helps in:

(a) appropriate attention to all the areas for comprehensive audit;

(b) identification of key areas needing more attention;

(c) timely completion of work;

(d) optimum utilization of assistants;

(e) no overlapping and proper co-ordination between the work done by different assistants, other auditors and experts.

Elements of Planning:

Planning of cost audit involves:

(a) Familiarization about the company and applicable cost accounting record rules;

(b) Collection of all relevant information;

(c) Evaluation of internal control procedures and the system;

(d) Preparation of appropriate cost audit programme; and

(e) Audit of working papers and cost sheets.

Cost Built up, Cost Audit Report and Compliance Report.

(e)(ii) Discuss the essential features of a cost accounting system. [5]

Answer:

Essentials

If a cost accounting system is to effectively serve the various purposes set forth e, it must incorporate in itself the following essential features.

a) Recognition of Diverse Behaviour of Cost Components

Cost of a product, a process or function comprises of several components, such as raw materials, direct operating labour, electricity, rent etc. It is now well recognized that all these do not behave in similar fashion with respect to volume of output and/or time. Obviously, larger quantities of raw materials are necessary to produce larger volumes of a finished product. However, supervision and rent might remain the same as long as the increased production can be handled with existing facilities.

b) Fixation of Control Responsibility for various Costs

A cost accounting system must recognize that control of costs be best exercised at the source. This implies that costs can be appropriately controlled by persons which in fact incur or have authority to incur them. Since the authority to incur various costs is not vested in one individual or place in the organization but is delegated to several individuals and functional areas throughout the organization, it is obvious that the control responsibility for various costs must likewise fall on several persons or places in the organization. A cost accounting system must, therefore, appropriately assign responsibility for different types of costs and must provide for classification, accumulation and reporting of cost information in accordance with control responsibility which in turn will aid the management in exercising effective control.

c) Provision of Yardstick for Performance Management

From control angle, the knowledge of actual cost of a product, a process, an event or an activity is not enough in itself. Simultaneously, one would like to know just how much it should have been in normal circumstances, and further would like to compare the actual with what "should have been". In other words, one would desire to measure one's own cost performance or the cost performance of those responsible to him. The measurement of cost performance helps to reveal and direct attention to the inefficient areas.

(e)(iii) What are the objectives and functions of the Cost Audit and Assurance Standards? [5]

Answer:

Objectives and Functions

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

a) To identify areas in which Standards on Quality Control, Assignment Standards, Standards on Auditing and Standards on Related Services need to be developed.

b) To develop Standards on Quality Control, Assignment Standards, Standards on Auditing and Standards on Related Services so that they may be issued under the authority of the Council of the Institute.

c) To develop Guidance Notes on issues arising out of any Standard or on auditing issues pertaining to any specific industry or on generic issues so that they may be issued under the authority of the Council of the Institute.

d) To formulate and issue Technical Guides, Practice Manuals and other Papers under its own authority for guidance of Cost Accountants in the cases felt appropriate by the Board.

e) To review the existing Standards, Guidance Notes, Technical Guides, Practice Manuals and other Papers to assess their relevance in the changed conditions and to undertake their revision, if necessary.

f) To provide Interpretations or formulate General Clarifications, where necessary, on issues arising from the Standards.

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

(a)(i) What are the scopes of internal control of a company. [4]

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]

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) Explain the main area of operation of an internal audit of a company? [5]

Answer:

Internal audit involves five areas of operations:

1. ***Reliability and integrity of financial and operating information*:** Internal auditors should review the reliability and integrity of financial and operating information and the means used to identify, measures, classify and report such information.
2. ***Compliance with laws, policies, plans, procedures and regulations:*** Internal auditor should review the systems established to ensure compliance with those policies, plan and procedures, law and regulations which could have a significant impact on operations and reports and should determine whether the organisation is in compliance thereof.
3. ***Safeguarding of Assets*:** Internal auditors should verify the existence of assets and should review the means of safeguarding assets.
4. ***Economic and efficient use of resources:*** Internal auditor should ensure the economic and efficient use of resources available.
5. ***Accomplishing of established objectives and goals for operations:*** Internal auditor should review operation or programmes to ascertain whether results are consistent with established objectives and goals and whether the operations or programmes are being carried out as planned.

It is said that scope of internal audit is very much related to business phases. The first phase of business is basically the planning stage, and the decisions are on issues like whether to make or buy, whether to undertake a new project or export etc. These are more of managerial decisions and the scope of internal audit is often not much practical, in the initial stage, unless it takes to what is called management audit. The 2nd phase is the execution stage having its base in the subsequent recording in the books of account. In this stage, the scope of internal audit emerges out of need for correctness of accounts and proper classification of heads in a required manner. The third and final phase is the review of transactions where scope of internal auditing is immense.

(b)(ii) What are the documentations required for an internal audit as per Standard on Internal Audit-3? [5]

Answer:

Internal Audit Documentation (SIA 3):

i. Internal audit documentation should be designed and properly organized to meet the requirements and circumstances of each audit. To formulate policies for standardization of internal audit documentation.
ii. It should be sufficiently complete and detailed for an internal auditor to obtain an overall understanding of the audit.
iii. All significant matters which require exercise of judgment, together with internal auditor's conclusion thereon should be included in the internal audit documentation. Documentation prepared by internal auditor should enable reviewer to understand:

- the nature, timing and extent of audit procedures performed to comply with SIAs and applicable legal and regulatory requirements;
- the results of audit procedures and audit evidence obtained;
- significant matters arising during the audit and conclusions reached thereon; and
- terms and conditions of an internal audit engagement/requirements of internal audit charter, scope of work, reporting requirements, any other special conditions, affecting the internal audit.

iv. It should cover all the important aspects of an engagement viz., engagement acceptance, engagement planning, risk assessment and assessment of internal controls, evidence obtained and examination/evaluation carried out, review of the findings, communication and reporting and follow up.

v. The internal audit file should be assembled within sixty days after the signing of the internal audit report.

vi. To formulate policies as to the custody and retention of the internal audit documentation within the framework of the overall policy of the entity in relation to the retention of documents.

(c) Prepare the checklist of Purchasing Function. [10]

Answer:

(i) Purchasing Function Checks

(a) Are there effective arrangements for minimizing the price of purchases, e.g. total purchases for multi location organizations, contract pricing, forward purchasing, quantity controls and correct timing?
(b) What arrangement are there for controlling stock investment, in particular for controlling deliveries of raw materials, perhaps as a result of contracts placed for raw materials to be called off as required?
(c) Is there evidence that the purchasing budget is developing on sound lines?
(d) Is the budget, once prepared, used as an effective control on the purchasing function?
(e) Are 'make-or-buy' proposals made to ensure optimum supply arrangements?
(f) What is the system for synchronizing deliveries with the scheduled production requirements?
(g) What follow-up is there on scheduled deliveries?
(h) Is the receipt of goods adequately controlled?
(i) What procedures are there for dealing with over-deliveries and under-deliveries?
(j) Is there an effective system of inspection of materials received?
(k) Are 100 percent of the goods received inspected, or are they sampled, or what other inspection method is used?
(l) What accounting procedures are there for ensuring that rejected goods are debited to the supplier, either on return, or when scrapped, and for charging the supplier for any re-work done to make the goods acceptable?
(m) Are there any statistical routines to determine the quality standards of suppliers and the rejection rates of goods supplied by them?
(n) Are there similar routines to determine the supplier's relative ability to deliver on time?

(o) Are standards conditions printed on the order forms, and do they adequately cover the purchaser for the commercial and business hazards applying to the purchase of goods? For example, do the conditions make clear whether the carrier is to be construed the agent of the seller or the buyer?

(p) What system is used for validating incoming invoices for goods?

(q) What method of control prevents duplicate payment for goods?

(r) What purchasing measuring are taken to rationalize cash flow and the amount of capital locked up in stocks?

(s) Are there means for assessing buyers' workloads?

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

(a) Harsh Ltd has the following extract Balance Sheets as on 31 March 2015 and 31 March 2014:

Particulars	₹ in lakhs	
	31 March 2015	31 March 2014
EQUITY AND LIABILITIES:		
Shareholder's Fund	**2,677**	**1,772**
Loan Funds	**3,470**	**2,983**
	6,147	**4,755**
ASSETS:		
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 Harsh 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 Harsh Ltd. [10]

Solution:

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 = $\frac{\text{Profit before tax}}{\text{Sales}} \text{x}100 = \frac{157}{24,265} \text{x}100 = 0.65\%$

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.

(b) Given below are the abridged balance sheets and profit & loss accounts of SP Spinning Mills Ltd. :

	1998-99	*1997-98*	*1996-97*
		(₹ In lakhs)	
Balance Sheet :			
Share capital	245	245	245
Reserves and Surplus	726	1,077	1,313
Long term borrowings	287	180	160
Working capital loans	1,639	451	672
Sundry creditors	1,616	1,255	1,015
Other Provisions	389	315	305
Total	4,902	3,523	3,710
Net block	1,009	541	612
Investments	19	19	19
Current assets :			
Inventory	1,160	1,521	1,641
Book Debts	11	114	172
Loans and advances	2,641	1,286	1,231
	62	42	35
Total	4,902	3,523	3,710
Profit & Loss Account:			
Sales	5,091	3,938	4,215
Other income	446	365	342
Total	5,537	4,303	4,557

Raw materials, stores and spares consumed	**3,728**	**2,775**	**2,964**
Factory wages	**162**	**215**	**206**
Salaries	**377**	**322**	**295**
Power and fuel	**826**	**673**	**710**
Repairs and maintenance:			
Buildings	**7**	**18**	**15**
Plant and Machinery	**38**	**54**	**48**
Vehicles	**43**	**33**	**24**
Depreciation:			
Buildings	**11**	**14**	**16**
Plant and machinery	**57**	**43**	**48**
Vehicles	**66**	**26**	**30**
Interest	**277**	**130**	**152**
Other overheads (excluding salaries and depreciation:)			
Factory overheads	**138**	**94**	**82**
Administrative overheads	**71**	**59**	**41**
Selling and distributing overheads	**87**	**83**	**80**
Loss for the year	**(-) 351**	**(-) 236**	**(-) 154**
Total	**5,537**	**303**	**4,557**
Sales for the year (Kgs.)	**4350890**	**3436921**	**3725405**

The bankers to the company appointed you as a Consultant for identifying the factors which have contributed to the continuing losses. Prepare a short note highlighting the factors which have prima facie led the company to sickness. [10]

Solution:

Working notes	1998-99	1997-98	1996-97
Sales – quantity kgs.	43,50,890	34,36,921	37,25,405

Sales (Value in ₹ Lakhs)	5,091	3,938	4,215
Average sales realization per Kg.- (₹)	117	115	113
Raw Materials, stores & spares consumed (₹- Lakhs)	3,728	2,775	2,964
Material cost as % of sales value (%)	73.2	70.5	70.3
Direct wage cost % of sales value (%)	3.2	5.4	4.9
Observations:			

From the above figures, it is apparent that the Company's declining profitability is NOT due to market conditions as revealed by the following factors:

(a) The sales price has been marginally increasing year to year.

(b) The very small increase in material cost is also in step with the increase in sales realization.

(c) The company has been able to control direct labour cost effective.

(d) The level of production has been maintained and has in fact improved in the latest year.

(e) Inventory and book debt levels have been brought down considerably.

On the other hand, the following factors present a disturbing picture and lead to the inference that the financial management is either incompetent, or the management was diverted the borrowed working funds to some other activity or invested in unproductive assets like vehicles:

	1998-99	1997-98	1996-97
Long term borrowings	287	180	160
Working capital loans	1639	451	672
Net block	1009	541	612
Loans & advances	2641	1286	1231
Depreciation, repairs & maintenance of vehicles	109	59	54
Interest	277	130	152

The increase in working capital borrowings and the consequent interest thereon were not warranted, especially when the funds blocked in inventory and book debts have come down. The additional interest burden and additional expenses on vehicles amount to ₹ 197 lakhs whereas the increase in loss as compared to the previous year is only ₹ 115 lakhs.

Preliminary conclusion:

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

(ii) The fixed assets have doubled. But there is no profit accruing by the increased assets.

(c) A firm can produce three different products from the same raw material using the same production facilities. The requisite labour is available in plenty at ₹8 per hour for all products. The supply of raw material, which is imported at ₹8 per kg., is limited to 10,400 kgs. for the budget period. The variable overheads are ₹5.60 per hour. The fixed overheads are ₹50,000. The selling commission is 10% on sales.

(i) From the following information, you are required to suggest the most suitable sales mix, which will maximize the firm's profit. Also determine the profit that will be earned at that level:

Product	Market demand (units)	Selling price per unit (₹)	Labour hours required per unit	Raw material required per unit (kgs.)
X	8,000	30	1	0.7
Y	6,000	40	2	0.4
Z	5,000	50	1.5	1.5

(ii) Assume, in above situation, if additional 4,500 kgs. of raw material is made available for production, should the firm go in for further production, if it will result in additional fixed overheads of ₹20,000 and 25 per cent increase in the rates per hour for labour and variable overheads. [10]

Solution:

Working Notes

(i) Calculation of Direct Material Consumption (per unit)

Product	Kgs. per unit	₹ per kg.	Amount (₹)
X	0.7	8	5.60
Y	0.4	8	3.20
Z	1.5	8	12.00

(ii) Calculation of Variable Overhead Per Unit (₹)

Product	Hours	Rate per hour (₹)	Amount (₹)
X	1	5.60	5.60
Y	2	5.60	11.20
Z	1.5	5.60	8.40

Statement of Contribution per unit and Ranking based on Contribution per kg. of Raw Material (₹)

Particulars		Products		
		X	Y	Z
Selling price	(a)	30.00	40.00	50.00
Direct material		5.60	3.20	12.00
Direct labour		8.0	16.00	12.00
Variable overhe3ad		5.60	11.20	8.40
Selling commission		3.00	4.00	5.00

Total variable cost	(b)	22.20	34.40	37.40
(i) Contribution	(a)-(b)	7.80	5.60	12.60
(ii) Raw material requirement per unit (kgs.)		0.7	0.4	1.5
Contribution per kg. of raw material	(i)/(ii)	11.14	14.00	8.4
Ranking		II	I	III

Since, the raw material supply is restricted to 10,400 kgs., it is to be allocated to each product based on its ranking and market demand as follows:

Product	Units	Raw material requirement per unit (kgs.)	Total Raw material requirement (kgs.)
X	6,000	0.4	2,400
Y	8,000	0.7	5,600
Z	1,600	1.5	2,400*
			10,400

*Balancing figure=2,400 kgs./1.5 kgs.=1,600 units

Statement of profit (₹)

Contribution			
X	(8,000x7.80)	62,400	
Y	(6,000x5.60)	33,600	
Z	(1,600x12.60)	20,160	1,16,160
Less: Fixed Cost			50,000
Profit			66,160

(b) If additional 4,500 kgs. of raw material is made available, the production will be as follows:

Product	Units	Raw material requirement (per unit/kg.)	Total Raw material requirement (kgs.)
X	6,000	0.4	2,400
Y	8,000	0.7	5,600
Z	4,600	1.5	6,900*
			14,900

*Balancing figure=6,900 kgs./1.5 kgs.=4,600 kgs.

Statement of Profit (₹)

Contribution			
X	(8,000x7.80)	62,400	
Y	(6,000x5.60)	33,600	
Z	(4,600x12.60)	57,960	1,53,960
Less: Increase on additional units			
Labour Cost	(3,000 unitsx25%x₹12)	9,000	

Variable overhead	(3,000 unitsx25%x₹8.40)	6,300	15,300
Net contribution			1,38,660
Less: Fixed Cost		50,000	
Add: Increase		20,000	70,000
Profit			68,660

Analysis: By using additional raw material of 4,500 kgs. in production of product Z by another 3,000 units will increase the profit by ₹2,500 (i.e. ₹68,660). Hence, production of additional 3,000 units of X is suggested.