FINAL EXAMINATION
GROUP - IV
(SYLLABUS 2016)

SUGGESTED ANSWERS TO QUESTIONS

DECEMBER - 2017

Paper-19 : COST AND MANAGEMENT AUDIT

Time Allowed : 3 Hours **Full Marks : 100**

The figures in the margin on the right side indicate full marks.

Answer *Question No. 1* which is compulsory and carries 20 marks and *any five* questions from *Question Nos. 2 to 8.*

Section – A (20 Marks)

1. Choose the correct answer with short justification /working. (1 mark for correct choice and 1 mark for justification/working) 2×10=20

(i) The Cost Accounting Standard 15 is a Cost Accounting Standard on _______.

(a) Employee Cost

(b) Utilities Cost

(c) Pollution Control Cost

(d) Selling and Distribution Overheads Cost

(ii) Overall Objectives of the independent Cost Auditor and conduct of an Audit in accordance with Cost Auditing Standard is dealt in _____________.

(a) Cost Auditing Standard 101

(b) Cost Auditing Standard 102

(c) Cost Auditing Standard 103

(d) Cost Auditing Standard 104

(iii) A company, engaged in construction business, is covered under the Companies (Cost Records and Audit) Rules, 2014 but does not include _____________.

(a) outsourcing by a sub-contracting company

(b) a company working on BOT (Build, Operate, Transfer) mode

(c) a company working in a Special Economic Zone

(d) a project undertaken as EPC (Eng., Procurement, Constn.) contract

(iv) A manufacturing unit showed, during the Financial Year 2016-17, the following financial data (in ₹ lakh): Net Sales 1,250, Export Incentives 85, Other income 106, Adj. of Finished Stock (+) 95, Materials 634, Salaries 425, Overheads 101.8, and Tax 52.6. The Value Added as per Rules is (in ₹ lakh) ____________.

(a) 946

(b) 796

(c) 755

(d) 688

(v) Royalty paid on production ₹ 35,000, Job Charges ₹ 20,000, Special Design Charges ₹ 20,000, Software Development Charges related to Production ₹ 27,000, and Travelling abroad for Training ₹ 25,000 The Direct Expenses as per CAS 10 is ₹ ____________.

(a) 92,000

(b) 1,00,000

(c) 1,02,000

(d) 1,27,000

(vi) Operational Audit can lead to better management with the focus on____________.

(a) Transaction-based analysis for Fraud Prevention

(b) Compliance of Rules

(c) Risk Identification, Process Improvement

(d) Budget Monitoring

(vii) Penalty paid to PF authorities is ____________ in Employee Cost.

(a) included

(b) excluded

(c) based on individual case

(d) partly included

(viii) Item appearing only in Cost Records is ____________.

(a) Profit on Sale of Assets

(b) Interest Received

(c) Loss on Sale of Assets

(d) Notional Interest on Capital

(ix) ____________ Analysis is evaluation of every resources declared in the industry.

(a) Capacity

(b) Energy

(c) Productivity

(d) Efficiency

(x) Which one of the following is not a professional misconduct in relation to Cost Accountants in Practice as per the Second Schedule of The CWA Act, 1959?

(a) He/she fails to invite attention to any material departure from the generally accepted procedure of costing and pricing applicable to the circumstances.

(b) He/she does not exercise due diligence or is grossly negligent in the conduct of his/her professional duties.

(c) He/she fails to report a material misstatement known to him/her to appear in a cost or pricing statement with which he/she is concerned in a professional capacity.

(d) In the opinion of the Council, he/she brings disrepute to the Profession or the Institute as a result of his/her action whether or not related to his/her professional work.

Answer 1.

(i) (d) Selling and Distribution Overhead Cost.

CAS 15 deals with the principles and methods of classification, measurement and assignment of Selling and Distribution Overheads, for determination of the cost of sales of product or service, and the presentation and disclosure in cost statements.

(ii) (c) Cost Auditing Standard 103.

Cost Auditing Standard 103 deals with the overall objectives of the independent cost auditor, the nature and scope of a cost audit and independent auditor's overall responsibilities when conducting an audit of cost statements in accordance with cost auditing standards. It also explains the requirements establishing the general responsibilities of the independent auditor applicable in all audits, including the obligation to comply with the cost auditing standards.

(iii) (c) A Company working in Special Economic Zone.

As per Rule 4(3) (ii) of the Companies(Cost Records and Audit) Rules 2014 such units would be outside the purview of cost audit.

(iv) (b) ₹ 796 Lakh.

(Sales 1250 + Export Incentive 85 + Adj of Finished stock 95)-(Materials 634) = ₹ 796 Lakh.

(v) (d) ₹ 1,27,000

[direct expenses as per CAS 10 = royalty paid on production + Job charges + Special Design Charges + Software development charges related to production + Travelling abroad for training = ₹ (35,000 + 20,000 + 20,000 + 27,000 + 25,000) = ₹ 1,27,000]

(vi) (c) Risk identification, process improvement: The objective is to assist the organization in performing functions more effectively and economically with focus on efficiency and effectiveness of operations, giving an early warning system for detection of potentially destructive problems.

(vii) (b) Excluded

Penalty paid to PF authorities is not normal cost and hence is excluded as per CAS 7 from employee cost.

(viii)(d) Notional interest on capital

This does not involve actual outlay of funds but is included in cost records as an opportunity cost to determine product cost. The other three items are not related to actual production and this do not form part of cost records.

(ix) (c) Productivity

The Productivity audit is basically an analysis of the productivity of the resources deployed by any organization. It is generally done to generate information about the status of productivity in the organization for the purpose of determining the scale of efficiency and effectiveness of 'resource utilization'.

(x) (d) Bringing disrepute to the profession or the institute is not considered a misconduct as per the Second Schedule of the CWA Act 1959. It is a misconduct as per the First Schedule, Part IV of the Act.

Section-B (80 Marks)

2. (a) (i) What are 'Books of Accounts' as per the Companies Act, 2013? Do 'Cost Records' become part of Books of Accounts?

(ii) Is maintenance of Cost Accounting Records mandatory for a multi-product company where all the products are not covered under the Rules, even if the turnover of the individual products, which are covered under the Rules, is less than rupees thirty five crore? 4+4=8

(b) (i) Mr. X, the Cost Auditor of a company, contributes articles in various papers or journals, discussing matters of professional interest. In the course of such discussion, he mentions various data which include some vital, but unpublished, data relating to his client company without its tacit approval. State whether there is punishment, if any, of the Cost Auditor for such contravention.

(ii) A member of the Institute, whether in practice or not, is liable for disciplinary action if he/she is found guilty of professional and other misconduct. Explain the term 'other misconduct." 4+4=8

Answer 2. (a)

(i) Section 2(13) of Companies Act, 2013 states that: "Books of Accounts" includes records maintained in respect of-

(i) All sums of money received and expended by a company and matters in relation to which receipts and expenditure take place;

(ii) All sales and purchases of goods and services by the company

(iii) The assets and liabilities of the company and

(iv) The items of cost as may be prescribed under section 148 in the case of company which belongs to any class of companies specified under that section.

Section 148 of Companies Act 2013 empowers the "central government to specify audit of items of costs in respect of certain companies".

As per Rule 2 (e) of the Companies (Cost Records and Audit) Rules 2014, "cost records" means books of accounts relating to utilization of materials, labour and other items of cost as applicable to the production of goods or provision of services as provided in Section 148 of the Act and such rules.

(ii) The Rules provide threshold limits for the company as a whole irrespective of whether all it's products are as per the prescribed industry /sector provided under Table A or Table B. The Rules do not provide any minimum product specific threshold limits for maintenance of Cost Accounting Records and consequently the company would be required to maintain Cost Accounting Records for the products covered under table A or Table B or both , even if the turnover of such products is below rupees thirty five crore.

Answer 2. (b)

(i) Clause (1) of Part I of the Second Schedule to the Cost and Works Accountant's Act 1959 deals with the professional misconduct relating to the disclosure of information by a CMA in practice relating to the business of his /her clients to any person other than his/her without the consent of the client or otherwise than as required by any law for the time being in force would amount to breach of confidence .The code of ethic further clarifies that such duty continues even after completion of the assignment. The CMA may, however, disclose the information in case it is required as a part of performance of his/her professional duties. In the given case Mr X has disclosed vital information of his client's business without the consent of the client under the impression that it will help the profession and the industry at large it is a professional misconduct covered by Clause (1) of Part (I) of the Second Schedule of the Cost and Work Accountant's Act 1959.

(ii) As per Part IV first schedule to the Institute of Cost and Work Accountant's Act 1959 a member of the Institute, whether in practice or not, shall be deemed to be guilty of other misconduct if-

1. He /She is held guilty by any civil or criminal court for an offence which is punishable with imprisonment for a term not exceeding 6 months and
2. In the opinion of the Council he/she brings disrepute to the profession or the Institute as a result of the action whether or not related to his /her professional work.

3. (a) (i) How would you treat the following as per the CAS 7 related to Employee Cost?

I. Separation Cost due to voluntary retirement, retrenchment termination, etc.

II. Idle Time Cost

(ii) Find the Employee Cost of a company for the year 2016-17 as per the CAS 7 from the following figures:

Particulars	(₹ lakh)
Salaries, wages, allowances and bonus	950
Wage award arrears for the previous year	85
Contribution to provident and other funds	188
Employee welfare	56
Abnormal Idle Labour cost due to strike	95
Wages of contractual labour	125
VRS payment for the year	66

4+4=8

(b) The following particulars pertaining to production of yarn are extracted from the records of Balarampur Textiles Ltd. for the year ended March 31, 2017:

Particulars	₹ '000
Direct Material Cost per unit inclusive of Excise Duty ₹ 280 thousand	2,560
Direct Wages & Salaries	1,540
Direct Expenses	450
Indirect Materials	533
Factory Overheads	897
Administrative Overheads (40% relating to Production activities)	1,250
Quality Control Cost	565
Research and Development Cost	600
Interest on Working Capital	350
Sale of Scrap Realised	460

You are to determine the cost of production for the purpose of captive consumption in terms of the Rule 8 of the Central Excise Valuation (DPE) Rules 2000 and as per the CAS-4 and the Assessable Value for the purpose of paying Excise Duty on captive consumption. 6+2=8

Answer 3. (a) (i)

I Separation costs related to voluntary retirement, retrenchment, termination etc, shall be amortised over the period benefiting from such costs. The amortised separation costs for the period shall be treated as indirect cost and assigned to the cost objects in an appropriate manner. However unamortised amount related to discontinued operations, shall not be treated as Employee Cost but should be charged to Profit and Loss account.

II Idle Time Cost shall be assigned direct to the cost object or treated as overheads depending on the economic feasibility and the specific circumstances causing such idle time. Cost of Idle time for reasons anticipated like normal lunchtime, holidays etc is normally loaded in the employee cost while arriving at the cost per hour of an employee/a group of employees whose time is attributed direct to the cost objects.

Answer 3. (a) (ii)

The employee cost for the company for the year 2016-17 is as follows:

(₹ Lakh)

Salaries, Wages, allowances and bonus	950
Wages of contractual labour	125
Contribution to provident fund and other funds	188
Employee Welfare	56
VRS payment for the year	66
Total	1385

Note : 1. As per CAS 7, arrear not related to the current year should not be included in the Employee Cost.

2. Abnormal idle time cost is charged to Costing Profit & Loss Account

3. It is assumed that the VRS payment does not relate to closure of any section or activity of the unit.

Answer 3. (b)

According to the Central Excise Valuation (Determination of price of Excisable Goods) Rules 2000, the assessable Value of goods used for captive consumption is 110% (w.e.f 5-8-2003) of cost of production of such goods. The manner of determination of cost of production for captive consumption is laid down in CAS 4.

Particulars	**₹ in '000**
Direct Material	2560
Direct wages and salaries	1540
Direct expenses	450
Indirect Materials	533
Factory Overheads	897
Administrative Overheads(40% on ₹.1250)	500
Quality Control Cost	565
R& D Cost	600
Total cost	7645
Less: realisation of scrap	460
Cost of production as per CAS 4	7185

Note : 1. The cost of Working Capital Interest is not chargeable to Cost of Production

2. Assessable value as per Excise Rules is ₹ 7903500 (110 % × 71,85,000)

4. (a) A company manufacturing various packing ingredients is not covered under the Companies (Cost Records and Audit) Rules, 2014. The Managing Director of the company wants to introduce costing system and wants your advice for coverage of various areas of Management Accounting Control. Discuss. 8

(b) What do you mean by 'Productivity Audit'? Mention some major ratios which are used for measuring productive efficiency. 8

Answer 4. (a)

The management Accountant during the course of the study will thoroughly review and stress upon the areas as follows :

(i) Nature of Industry - Batch, Job, Process etc

(ii) Locate and Fixation of cost centres

(iii) Procedures for accounting of materials and spares etc

(iv) Method of accounting treatment of wastes, rejections and defectives

(v) Systems of recording of wages, salaries and overtime and find out their judicial allocation

(v) Incentive schemes in Vogue

(vii) Find out an optimum mechanism of allocation / apportionment of utilities

(viii) Method of accounting of depreciation and charging depreciation to the designed cost centres

(ix) Method of apportionment of service department expenses to production departments

(x) Fix a basis of absorption of overheads to products

(xi) Basis of absorption interest, bonus, gratuity and selling and distribution overheads

(xii) Introduction to budgetary control systems

(xiii) Find whether internal audit system exists or not and if not advise suitably

(xiv) Draw a method of accounting of Production and Sales.

(xv) Advise suitable treatment of Research and Development expenses

Answer 4. (b)

The Productivity audit is basically an analysis of the productivity of the resources deployed by any organization. It is generally done to generate information about the status of productivity in the organization for the purpose of determining the scale of efficiency and effectiveness of 'resource utilization'. The term 'resources' here would include not only "money" but also "men", "machines", "materials" and "methods".

In other words, the objectives of productivity audit is - (a) to attain optimum result, and (b) to improve on the benchmarks. This audit would generally comprise - (a) comparison of expected returns on utilization of the resources vis-a-vis the actual returns; (b) comparison of optimum returns on utilization of the resources vis-a-vis the actual returns; and (c) the steps taken to improve benchmarks of returns and the utilization.

The term 'Productivity' is normally attributed only to the "productivity of labour" or "efficiency of labour" alone. But productivity audit is actually "productivity of every resource employed". Productivity audit is done by - (a) Ratio analysis - Return on capital employed - Return on sales -Turnover ratios of fixed assets, current assets, inventories, category-wise debtors etc. (a) Capacity utilization of plant, machinery and equipment against available capacity, (b) Productivity analysis of man (labour) hours in time and cost, (c) Material consumption against norms and benchmarks.

The following ratios are generally used in measuring productive efficiency of the resources deployed and utilized:

Resources Deployment:

(i) Capital employed per capita

(ii) Capital employed per unit of product

(iii) Gross profit to capital employed

(iv) Net profit to capital employed

(v) Debt equity ratio

(vi) Net worth and long-term debts to gross fixed assets

(vii) Net worth and long-term debts to net fixed assets

(viii) Debts to fixed loans

(ix) Debts to floating loans

(x) Current assets to current liabilities

(xi) Net working capital

(xii) Total inventory to capital employed.

Resource Utilisation:

(i) Capacity utilisation - Installed capacity: Utilised capacity of machines (by units)

(ii) Capacity utilisation - Installed capacity: Utilised capacity of machines (by machine hours)

(iii) Machine time available : Machine time utilized

(iv) Machine time consumed : Per unit of product (individually)

(v) Machine time consumed : Per capita

(vi) Gross fixed assets : Turnover

(vii) Net fixed assets : Turnover

(viii) Inventories : Turnover (inventory turnover)

(ix) Raw materials : Turnover (No. of days of stock)

(x) Work in process : Turnover (No. of days of stock v. cycle time)

(xi) Finished goods : Turnover (No. of days of stock v. lead time)

(xii) Labour time consumed : Division-wise

(xiii) Labour time consumed : Product-wise

(xiv) Labour time consumed : Product group-wise

(xv) Turnover per capita

(xvi) Value added : per capita

(xvii) Indirect labour: Direct labour number

(xviii) Indirect labourcosts : Direct labour costs

(xix) Levels of management

5. (a) (i) State which one of the following companies is required to appoint Internal Auditor as per the Companies Act, 2013, and the Rules made thereunder:

Figures are in ₹ crore and correspond to the previous year.

Name	Nature	Equity Capital	Turnover	Loan from Bank/PFI	Public Deposit
LMN Ltd.	LISTED	100	190	50	24
PQR Ltd.	UNLISTED PUBLIC	60	190	50	24
XYZ Ltd.	UNLISTED PRIVATE	60	190	50	-

(ii) Can the Chief Cost Accounts Officer of the company be given additional charge as Internal Auditor? **6+2=8**

(b) You are the Internal Auditor of Atlas Manufacturing Ltd. The Audit Committee desires to enquire into the cause of abnormal rise in raw materials costs during the previous month when there was no significant change in the production programme. How will you proceed? **8**

Answer 5. (a)

(i) Section 138 of the Companies Act 2013 deals with provisions of Internal Audit. Rule 13 of the Companies (Accounts) Rules, 2014 requires

(a) Every listed company

(b) Every unlisted company having (i) paid up share wealth of rupees fifty crore or more during the preceding financial year or (ii) turnover of two hundred crore or more during the preceding financial year or (iii) outstanding loans or borrowings from banks or public financial institutions exceeding rupees one hundred crore or more at any point of time during the preceding financial year or (iv) outstanding deposits of twenty five crore or more at a point of time during the preceding financial year and

(c) Every private company having (i) turnover of two hundred crore rupees or more during the preceding financial year or (ii) outstanding loans or borrowing from banks or public financial institutions exceeding rupees one hundred crore or more at any pointy of time during the preceding financial year

Shall be required to appoint an Internal Auditor or Firm of Internal Auditor.

Here, (1) LMN Ltd. Being listed company has to appoint Internal Auditor in either case.

(2) PQR Ltd. An unlisted company exceeds capital limit of rupees 50 crore though the minimum turnover, minimum loan and public deposit are not met. The company has to appoint an Internal Auditor.

(3) XYZ Ltd. An unlisted private company need not appoint Internal Auditor as the limits of appointment of Internal Auditor are not met.

(ii) Rule 13 of the Companies (Accounts) Rules, 2014 states that Internal Auditor may or may not be an employee of the company. There is no mandate in the law that the post of Internal Auditor needs to be full time. The Chief Cost Accountant officer being otherwise eligible can be appointed as Internal Auditor in addition to his present job, if the Audit committee or the Board of Directors consider the same. Additional duties given to the Chief Cost Accountant Officer to act as Internal Auditor of the company is therefore permissible under Rules.

Answer 5. (b)

The Internal Auditor has a duty to inquire into the cause of financial disorder and report to the Management. The abnormal rise in raw material costs in the previous month without any significant change in production programme must raise concern. Hence, it may be considered as abnormal cost and the auditor should proceed on the following lines:

1. **Variable Analysis:** A variance analysis of the actual cost with that if the standard or if there is no Standard Costing System, proceed with that of the previous month. The analysis will highlight (a) Price Variance (b) Volume Variance (c) Usage.

   In case of abnormality in price:

(i) Procure a list of raw materials, showing the names and detailed qualities of each raw material

(ii) Enquire whether there is any change which will affect material usage e.g changes in

(a) source of supply of raw materials

(b) methods or process

(c) market rates

(d) alternative material cost in substitution of the original.

(iii) Enquire whether any new production line was taken up during the month in respect of which Standard Input-Output ratio is yet to be set up.

(iv) Purchase of various lots

(v) Identification of each lot with production results.

2. Usage Figures:

(i) Obtain the standard consumption figures and ascertain the basis of computation of normal usage figures

(ii) Examine whether the basis adopted for usage calculation is the same as that adopted for the previous months

(iii) See the breakup of normal wastage (a) transit (b) storage (c) handling and (d) processing

(iv) obtain a statement showing break up of actual material consumption and

(v) Ascertain actual wastage figures for the month under review and compare the results of the analysis for some of the previous months.

3. Abnormal process loss:

(i) Material Quality: Examine inspection and testing reports to find out if raw materials purchased are of poor quality or sub-standard. This will be most useful if it is possible to identify the consumption out of each lot that has been purchased.

(ii) Machine Utilisation: Machine breakdown, power failure etc. may also result in loss of materials in process. Check machine utilisation statements.

(iii) Inspection: A high rate of rejection in the finished lots may also be responsible for abnormal wastage. Examine the Inspection Reports for the inspection carried out on the completion of each stage of work or process.

(iv) Old Lot Consumption: It is possible that the wastage may have occurred because the particular lot out of which issues were made in was lying in the store for a longtime.

(v) Previous Period Comparison: Compare the wastage figures of this year with that of the corresponding period last year and see whether there is any correlation.

4. Abnormal Storage and handling Loss: This can happen due to write-offs on the account of reconciliation of physical and book stocks. In case of periodical physical stocktaking, such write offs will be reflected only in the month in which reconciliation takes place. There can be accidental theft or fire losses in storage. The Auditor should examine such possibilities.

6. (a) **The following are the summarised Balance Sheet and Income Statement of Ambica Cement Co. Ltd. which is selling Cement & Clinkers. The Management wants to know how its financial leverage appears vis-a-vis the norm of the industry.**

Income Statement for the year ended 31.03.2017 (in ₹ '000) **(5)**

Sales	9,800
Cost of Goods Sold	7,460
Less: Administrations & Selling Overheads	750
Interest	280
Tax	330
Earnings after Tax	980

Balance Sheet as on 31.03.2017 (in ₹ '000)

Equity & Liabilities		Assets	
Share Capital	1,500	Net Fixed Assets	6,550
Reserves, Retained Earnings	3,700	*Current Assets*	
Loan from IDBI	1,800	Inventory	1,600
Short-term Loan	1,200	Trade Receivables	1,100
Trade Payables	1,100	Cash	800
Other Current Liabilities	750		
	10,050		10,050

(b) **A unit generates bio-gas out of the waste of industrial alcohol. The unit generates power from diesel oil and, in addition, the said bio-gas so generated is used as a fuel in generating steam for power. The high pressure steam is first sent to the STEAM TURBINE and the exhaust steam is used in the process of manufacturing alcohol. The following details are extracted from the financial accounts and the cost accounting records of the unit for the year ending 31.03.2017:**

	Boiler (₹)	Steam Turbine (₹)
Cost of Water	13,10,000	
Fuel Oil	11,50,05,800	
Bio-gas Plant expenses	3,20,60,500	
Stores and Chemicals	3,10,000	79,200
Salaries and Wages	37,10,000	8,79,600
Repairs and Maintenance	75,15,400	3,09,600
Depreciation	21,56,250	7,80,000
Other expenses	48,95,500	1,45,200
High Pressure Steam generated (mt.)	43,690	
Power generated (kWh.)		30,60,500

Note: The fall in the Enthalpy value of the steam is 8%. Prepare two separate cost sheets for steam and power as per the Companies (Cost Records and Audit) Rules, 2014 for the year ended March 31, 2017. **8**

Answer 6. (a)

For assessing financial health of the company, it is preferable to analyse

(i) Current Ratio

(ii) Inventory Turnover Ratio

(iii) Return on Total assets and

(iv) Interest Coverage Ratio

(Figures otherwise not stated are in ₹ '000)

1.	Current Ratio = Current Assets /Current Liabilities (1600+1100+800)/(1200+1100+750) = 3500/3050	1.15
2.	Inventory Turnover Ratio = Cost of Goods Sold /Inventory = 7460/1600	4.66
3.	Return on TOTAL ASSETS = Profit after Tax /Total Assets = 980/10050	9.75%
4.	Interest Coverage Ratio = Profit before Tax and Interest/Interest = (980+330+280)/280	5.68
5.	Debt Equity Ratio = Long Term Debt/Shareholders Funds =1800/(1500+3700)=1800/5200= 0.35:1	0.35 :1 (Favourable)

The current Ratio is nearly 1 times which is on an average nearing the industry average in cement industry. The inventory Turnover ratio is good considering low inventory holding compared to the level of turnover.

Return on total assets is satisfactory considering high capital base of the company mostly financed by its own finance. Interest coverage ratio is satisfactory since the interest cost is low which indicates that the company availed partial limit of working capital loan during the whole year. The company is financed by its own capital which means financial leverage is low.

Answer 6. (b)

(i) Cost of Steam Quantity Produced : 43,690 Metric Ton

	Total amount (₹₹)	**Cost/Mt(₹₹)**
Water	1310000	29.98
Fuel Oil	115005800	2632.31
Bio -gas Plant expenses	32060500	733.81
Stores and Chemicals	310000	7.1
Salaries and Wages	3710000	84.92
Repairs and Maintenance	7515400	172.02
Depreciation	2156250	49.36
Other Expenses	4895500	112.05
Total	166963450	3821.55

(ii) Cost of Power generated by Steam Turbine

Power Generated : 30,60,500 KWH

	Total amount(₹₹)	Cost/Kwh (₹₹)
Steam	166963450	54.55
Stores and chemicals	79200	0.03

Salaries and wages	879600	0.29
Repairs and maintenance	309600	0.1
Depreciation	780000	0.25
Other expenses	145200	0.05
Total	169157050	55.27
Less: Credit for exhaust steam(92%)	155624486	50.85
Cost of power used in alchohol manufacture	13532564	4.42

7. (a) Southern Auto Components Ltd. has received an enquiry for supply of 2,50,000 numbers of special type of auto components. The Company can execute the assignment provided a capital investment of ₹ 3,00,000 and working capital to the extent of 3 months' cost of sales are made available. The costs estimated are as follows:

Raw Materials - @ ₹ 3.25 per unit
Direct Labour Hours - 8,000
Labour Rate - ₹ 4.50 per hour
Factory Overheads - ₹ 4 per direct labour hour
Selling and Distribution expenses - ₹ 30,000

Borrowed funds will be available @11.5% on additional capital outlay. The company expects a net Return of 25% on Sales. The Managing Director wants a Cost and Price statement, indicating the price which should be quoted to the customer. 8

(b) The following is a summary of the Profit and Loss Account of M/s. Straw Berry Company Limited for the year ended 31.03.2017 (₹ in lakh):

Sales		**13,540**
Cost of Sales: Raw Materials, Stores, Spares	**5,600**	
Excise Duty	**830**	
Salaries, Wages	**1,400**	
Power and Fuel	**470**	
Repairs: Major Breakdown	**35**	
Regular Maintenance	**94**	
Selling and Distribution Cost	**1,040**	
Insurance	**56**	
Rent, Rates and Taxes	**97**	
Printing, Stationery, etc.	**437**	
Travelling	**776**	
Other Administrative expenses	**426**	
Depreciation	**391**	
Interest	**1,494**	
Total expenses		**13,146**
Profit		**394**

There was a major breakdown of machinery, resulting in loss of production for 42 days in June and July, 2016 and there was a labour strike of 97 days from 14.02.2017 to 21.05.2017. The company produced a single product (Steel-Billet) and the production during the year was 9,42,000 kgs. You are required to compute the amount of

abnormal cost on account of the breakdown and strike and the impact on cost per unit of output. Where, do these figures find a place in the Cost Audit Report? 8

Answer 7. (a)

Special type Auto Components: 2,50,000 Nos	**₹ in'000**	**₹ in '000**
Materials (250,000 @ ₹ 3.25)	812,500	
Labour 8000 Hrs @ ₹ 4.50	36,000	
Prime Costs		848,500
Factory Over Heads (8000 × 4)	32,000	
Factory Cost		8,80,500
Selling and Distribution Cost	30,000	
Cost of Sales		9,10,500
Interest @11.5% on 300000 +0.25 × 910,500)	60,677	
Total Cost		9,71,177
Profit		323,726
Sales		12,94,903

Working Notes : Calculation of Sales
Sales = Total Cost × (1.00-0.25%)=971177/0.75 = ₹ 12,94,903
Profit = Sales - Cost = 1294903- 971177 = ₹ 323726
Quote Per Unit = 12,94,903 /250000 = ₹5.18

Answer 7. (b)
Loss of working days due to abnormal situation are :
Breakdown 42 days -Salary Paid
Strike 46 Days (up to 31st March , 2017) - No Salary Paid
Total 88 Days, ₹ in Lakh

Income	13,450
Variable Exp : Raw Materials stores 5,600	
Excise Duty 830	
Power Fuel 470	6,900
Margin	6,640
Fixed Cost (13,146 -6900)	6,246

Salaries amounting to ₹ 1,400 Lakh is for (365-46) = 319 Days

Abnormal cost comes to

Fixed Cost on PRODUCTION	Total(₹)	Abnormal (₹)	Normal (₹)
Breakdown Repairs	35	35	00
Salaries Wages (in the ratio 42:319)	1400	184	1216
Interest	1494	00	00
Selling Distribution Cost	1040	00	00
Production Fixed Cost (Balance figure in the ratio 88:365)	2277	549	1728
Total	6246	768	2944
Production Cost Per Kg : (942000 Kg)	Variable = 6900/9.42 = ₹ 732.48	Fixed Cost 2944/9.42 = ₹ 312.52	Abnormal Cost = 768/9.42 = ₹ 81.52

Note :

1. Interest, Selling charges are not included in the Cost of Production.
2. Abnormal Cost is excluded from Cost of Sales and charged to Profit & Loss Account
3. In the Cost Accounting Policy declared in Annexure to Cost Audit Report 'A', the treatment of abnormal or non-recurring cost has to be declared
4. The analysis of value addition and distribution of Earnings show Extra ordinary expenses as post Value Addition.

8. Answer any four. 4x4=16

(a) How to treat Inward Transportation Cost as per the Cost Accounting Standard 5? How Transportation Cost is to be determined in case the manufacturer is having its own transport fleet? 4

(b) Write a short note on the role of Internal Auditor of a company to review Custodianship and Safeguarding of Assets. 4

(c) A company is facing problem in satisfying customers' orders leading to backlog of supply position. How to identify the problem by means of Operational Audit? 4

(d) From the following information, find the Economic Value Added (EVA) of a company for the previous year 2016-17:

Particulars	Amount (₹ '000)
Value added as per the Annexure to the Cost Audit Report-Part D	30,00,000
Distribution of Earning to Wages	12,50,000
Interest	3,30,000
Dividend @ 12%	3,60,000
Taxes	3,50,000
Capital Employed (as in the Cost Audit Report)	65,00,000

The Dividend at 12% of paid up capital is normal as per the market norms for the industry.
Taxes and all expenses are considered on cash basis. 4

(e) From the following figures of Systematics Polytex Ltd., compute the landed cost of Egyptian Cotton for the year 2016-2017:

Particulars	Amount
Materials	₹35,000
Import Duty	₹ 3,35,000
Freight Inward	₹ 1,62,000
Insurance of Import by sea	₹ 48,000
Cash Discount	₹ 33,000
Bank Interest for Import Credit	₹ 15,000
CENVAT Credit refundable	₹ 37,000
Weight Reduction due to Moisture Loss	0.6%

Parity value of US $:

On the date of Contract ₹ 64.40

On the date of Import ₹ 64.60

On the date of Payment ₹ 65.20 **4**

Answer 8. (a)

As per the Cost Accounting Standard 5, Inward transportation cost is the transportation expenses incurred in connection with the materials/goods received at factory or place of use. Inward transportation costs shall form the part of the cost of procurement of materials which are to be identified for proper allocation/apportionment to the materials/ products.

In case of a manufacturer having his own transport fleet, proper records shall be maintained to determine the actual operating cost of vehicles, showing the details of various elements of cost, such as salaries and wages of driver, cleaners and others, cost of fuel, lubricant, grease, amortised cost of tyres and battery, repairs and maintenance, depreciation of vehicles, distance covered and trips made, goods hauled transported to the depot. Separate records should be maintained as per Appendix 1 to the standard separately for

(i) Inward transportation

(ii) Outward transportation

(iii) Movement for home consumption and export

(iv) Separate for production and trading activities

(v) Separate for transportation other than by road, viz, by air, etc.

Answer 8. (b)

The Internal Auditor should review the control system to ensure that all assets are accounted for fully. He/ she should review the means used for safe guarding assets against losses viz, fire, improper or negligent activities, theft, illegal activities etc. He/she should review the control system for intangible assets, e.g, the procedure relating to credit control. Where a company uses electronic control equipment, the physical and system control on processing facilities as well as data storage should be examined and tested. He or she should review adequacy of the insurance cover for the various risks involved. He/she should also verify the existence of assets. Para 30 of the Companies(Cost Records And Audit) Rules, 2014 states that "records of physical verification may be maintained in respect of all items held in the stock such as raw materials, process materials, packing materials, consumable stores, machinery spares, chemicals, fuels, finished and then assets etc. Reasons for shortages or surplus arising out of such verifications and the method followed for adjusting the same in the cost of the goods or services shall be indicated in the records."

Answer 8. (c)

The Operational Auditor may use the technique of Work Load Measurement to assess the situation. He/She may draw up a questionnaire to assess the situation so as to include the following queries:

- Is there a backlog of work and if so whether the same is due to increased volume or inadequacy of men, material or machines?
- Is the increase in work volume is temporary or may continue?

- Will the situation likely to ease with additional inputs like personnel, machines etc?
- Is the workload of each employee is justified or needs adjustment through improved supervision or training?
- Will investment in advanced technology will commensurate with benefits derived from it?
- What control measures exist to assess the work efficiency and what are the remedial measures?

The operational auditor will proceed to finalise the report and submit to the Management after collecting and analysing the information received.

Answer 8. (d)

Economic value added (EVA) is a measure of a company's financial performance based on the residual wealth calculated by deducting its cost of capital from its operating profit adjusted for taxes on a cash basis. EVA can also be referred to a s economic profit.

Particulars	₹
Value Added as per the Annexure to the Cost Audit Report-Part D	3000000
Less: Distribution of Earnings to Wages	1250000
Operating profit	1750000
Less: Interest	330000
PBT	1420000
Tax	350000
PAT	1070000
Dividend	360000
EVA	710000
Capital Employed(as in the Cost Audit Report)	6500000
EVA as a % of Capital Employed	10.92

Note: Dividend Distribution is not an expense but is considered as a Notional cost of Capital depending on the nature of Industry, Location, Legal Provisions etc. Here dividend payment made by the company is considered as an optimum cost of equity capital and is deducted from the margin to determine Economic profit.

Answer 8. (e)

Landed Cost of Material ₹

Materials Cost (35,000 × 64.40)	22,54,000
Import Duty	3,35,000
Freight Inwards	1,62,000
Insurance by Sea	48,000
Total	27,99,000
Less: Cash Discount	33,000
Less: Cenvat Credit	37,000
Landed cost of Materials	27,29,000
Unit cost increased by 100/99.4 times (due to weight loss)	

Note :
1. Exchange Loss, finance costs are not allowable for inclusion in the Material Cost
2. Weight Loss does not affect the total cost, but the unit cost is enhanced by the percentage of weight loss.