FINAL EXAMINATION

GROUP IV

(SYLLABUS 2012)

SUGGESTED ANSWERS TO QUESTIONS

DECEMBER 2015

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.

This paper contains 3 questions, representing three separate sections.

All three questions are compulsory, subject to the specific instructions provided against each question.

All workings wherever necessary, must form a part of your answer.

Assumptions, if any, should be clearly stated.

Please : (1) Answer all bits of a question at one place.
(2) Open a new page for answer to a new question.

SECTION A (60 marks)

1. Answer *any four* questions. (carrying 12 marks each):

(a) (i) (A) What is the meaning of "Turnover" in relation to the Companies (Cost Records and Audit) Rules, 2014?

(B) SHANHITA LTD., a manufacturing company, producing Industrial chemicals had the following income during the year 2014-15.

Income:	(Amount in ` Lakhs)
Sales: Manufactured products	43,750
Traded products	2,830
Income from job Works	780
Sale of Defectives	130
Export Incentives	85
Cash Discount Received	35
Note: Sales inclusive of Excise Duty	2,840

Required:
Find out the Turnover of the company as per the Companies (Cost Records and Audit) Rules, 2014. **2+4=6**

(ii) The following details of the process-wise wastages on inputs are taken from the Cost Accounting Records of MANAVI COTTON MILLS LTD. a yarn manufacturing company, for the year ended March 31, 2015:

Process	% of Wastage on Input
Mixing and Blow Room	9.20
Carding	6.95
Drawing	1.25
Roving (Simplex)	1.15
Ring frame (Spinning)	7.00
Winding	1.75

Required:

Calculate the process-wise "WASTE MULTIPLIER" factors for the year ended March 31, 2015. 6

(b) (i) What is installed capacity and how is this different from the total available capacity? How the installed capacity is to be calculated in a multi-product company using the same machine/facilities?

Should installed capacity be the capacity at the beginning of the year or at the end of the year under Audit? 5

(ii) GLORY LTD., a manufacturing company provides the following extracts from its Cost Accounting Records for the year ended March 31, 2015:

The total capacity for 5 Machines per hour as per the company's specification.	2500 units
No. of shifts (each shift of 8 hours) per day	3
Paid holidays in a year (365 days):	
(i) Weekly holidays	52
(ii) Other holidays	10
Annual maintenance is done within these holidays (i.e. 10)	
Preventive maintenance for the machines is carried on during weekly off day.	
Normal idle capacity due to lunchtime, shift changes etc. per shift	0.5 hour
Production based on sales expectancy in past 3 years (units in lakh):	154.50
	159.54
	166.66
Actual production for the year ended March 31, 2015:	158.80

You are required to calculate:

(1) Installed Capacity
(2) Practical Capacity
(3) Actual Capacity
(4) Normal Capacity
(5) Idle Capacity
(6) Abnormal Capacity—
—Keeping in view of the relevant Cost Accounting Standard (CAS-2). 7

(c) The following figures are extracted from the Cost Accounting Records of SINJINI LTD. a single product manufacturing company:

Year ended 31st March	2015	2014
	(Amount in ` lakh)	
Gross Sales including Excise duty:	5,200	4,160
Excise Duty	400	320
Other Income	300	200

Increase in Value of Stock of Finished Goods	20	10
Raw materials Consumed	1,760	1,440
Direct wages, Salaries, Bonus, Gratuity etc.	440	352
Power & Fuel	240	192
Stores and Spares	160	140
Cess and local Taxes	120	100
Other manufacturing Overheads	430	370
Administrative Overheads:		
Audit fees	36	30
Salaries & Commission to Directors	48	40
Other Overheads	260	220
Selling and Distribution Overheads:		
Salaries & Wages	36	30
Packing and Forwarding	20	16
Other Overheads	250	200
Total Depreciation	120	120
Interest Charges:		
On Working Capital Loans from Bank	60	25
On Fixed Loans from IDBI	90	70
On Debentures	30	30
Provision for Taxes	316	200
Proposed Dividends	420	230

You are required to calculate the following parameters as stipulated PART-D, PARA-3 of the Annexure to Cost Audit Report under the Companies (Cost Records and Audit) Rules, 2014 for the year ended March 31, 2015 and March 31, 2014:

(i) Value Addition
(ii) Earnings available for Distribution
(iii) Distribution of Earnings to the different claimants. 5+1+6=12

(d) (i) How would you treat the following as per CAS-11 related to Administrative Overheads?
(A) Leased Assets
(B) Cost of Administrative Services procured from outside
(C) Cost of Software 2×3=6

(ii) The Rules state that cost records are to be maintained in Form CRA-1. However, CRA-1 does not prescribe any format but only provides principles to be followed for different cost elements. What are the role and status of Cost Accounting Standards/GACAP and its applicability vis-à-vis CRA-1? 4

(iii) Many companies have filed Form 23C as well as Form CRA-2 for 2014-15 in respect of different products and/or multiple Cost Auditors, if applicable.
Which SRN number has to be reported in the Cost Audit Report while filing the same in XBRL mode? 2

(e) (i) "Risk of Material Misstatement at the assertion level consists of two components (as per CAAS-103)"—Explain. 7

(ii) The companies (Cost Records and Audit) Rules, 2014 requires submission of a Single Cost Audit Report at the company level.
What is the procedure of certifying and submission of Cost Audit Report of a company where more than one Cost Auditor is appointed? 5

(f) (i) The Cost Accountant of TRINCUS TEXTILES MILLS LTD. has arrived at a Profit of ` 20,10,500 based on Cost Accounting Records for the year ended March 31, 2015. Profit as per Financial Accounts is ` 22,14,100.

As a Cost Auditor, you find the following differences between the Financial Accounts and Cost Accounts:

		`
(1)	Profit on Sale of Fixed Assets	2,05,000
(2)	Loss on Sale of Investments	33,600
(3)	Voluntary Retirement Compensation included in Salary & Wages in F/A	50,25,000
(4)	Donation Paid	75,000
(5)	Insurance Claim relating to previous year received during the year	5,08,700
(6)	Profit from Retail trading activity	32,02,430
(7)	Interest Income from Inter-Corporate Deposits	6,15,000
(8)	Decrease in value of Closing WIP and Finished goods inventory	
	as per Financial Accounts	3,82,06,430
	as per Cost Accounts	3,90,12,500

You are required to prepare a Reconciliation Statement between the two Accounts for the year ended March 31, 2015. **6**

(ii) A company is engaged in manufacturing products on its own as well as purchase the same products from other companies. The outsourced products are treated as trading activity in the Financial Accounts. The Same products are also manufactured by supply of materials to converters.

What would be treatment of such products for the purposes of maintenance of Cost Accounting Records and Cost Audit? **2**

(iii) What is the procedure for appointment of Cost Auditor under the Companies Act, 2013? **4**

Answer:

1. (a) (i) (A) Sub-section 91 of Section 2 of the Companies Act, 2013 defines "turnover" as "the aggregate value of the realization of amount made from the sale, supply or distribution of goods or on account of services rendered, or both, by the company during a financial year. For the purposes of these Rules, "Turnover" means gross turnover made by the company from the sale or supply of all products or services during the financial year. It includes any turnover from job work or loan license operations but exclude duties and taxes. Export benefit received should be treated as a part of sales.

(B) **The turnover of the company (Shanhita Ltd) for the year 2014-15 as per the Companies (Cost Records and Audit) Rules, 2014 is calculated as follows:-**

	(Amount in ` lakhs)	
Sales: Manufactured products	43,750	
Traded products	2,830	
Income from job works	780	
Sale of Defectives	130	
Exports incentives	85	47,575
Less: Excise Duty		2,840
Turnover		44,735

(ii)

MANAVI COTTON MILLS LTD.

Calculation of "Waste Multiplier" factors for the year ended March 31, 2015.

Process	% of wastage on input	Net output for 100 units of input	Waste multiplier
Total		100	1.3270
Maxim and blow room	9.20	(100-9.20) = 90.80	1.2049
Carding	6.95	90.80 - (90.80x0.0695) = 84.49	1.1211
Drawing	1.25	84.49-(84.49x0.0125)= 83.43	1.1071
Roving (Simplex)	1.15	83.43-(83.43x0.0115)= 82.47	1.0944
Ring frame (spinning)	7.00	82.47-(82.47x0.07) = 76.70	1.0178
Winding	1.75	76.70-(76.70x0.0175) = 75.36	1.0000

Working Notes:

(1) Mixing and Blow Room: 100 - 9.20 = 90.80
Carding : 90.80 - (90.80 x 0.0695) = 90.80 - 6.31 = 84.49
Drawing: 84.49- (84.49 x 0.0125) = 84.49 - 1.056 = 83.43 etc.

(2) Waste Multiplier:
(1) 100/75.36 = 1.3270 (2) 90.80/75.36 = 1.2049
(3) 84.49/75.36 = 1.1211 (4) 83.43/75.36 = 1.1071
(5) 82.47/75.36 = 1.0944 (6) 76.70/75.36 = 1.0178

(b) (i) The Institute of Cost Accountants of India has defined "Installed Capacity is the maximum productive capacity, according to the manufacturer's specifications or determined through an expert study" [CAS-2 of Cost Accounting Standards]. The Installed Capacity to be disclosed in the Quantitative Details of CRA-3 is to be considered as at the beginning of the year. Capacity enhanced during the year should be considered as the increase in Installed Capacity during the year on pro-rata basis.

Available capacity is the total installed capacity after adjustment of capacity enhanced during the year and if any capacity is available by means of leasing arrangement or taking on third-party capacity for increasing the total capacity.

If the same available capacity is utilised for production of multiple products, the following different basis may be adopted to determine the available capacity in respect of each of the products:

(i) If the company has a system of allocating the total available capacity for production of multiple products, then such allocated available capacity is to be considered for the products being manufactured by utilising the same production facility.
(ii) If the production allocation is not pre-determined and changes from period to period, then the capacity utilisation is to be determined on the basis of total production of all the products taken together and the total available capacity should be considered for all the products.

(ii) **GLORY LTD.**

CALCULATION OF DIFFERENT CAPACITIES FOR THE COMPANY:

(1) Installed Capacity : 365 x 8 x 3 x 2500 = 21900000 i.e. 219 lakh units

(2) Practical capacity: (365 – 52 -10)x (8-0.5)x3x2500= 17043750 i.e. 170.4375 lakh units

(3) Actual capacity (given) = 158.80 lakhs units
Actual capacity utilization: (158.80/219) x 100 = 72.51%

(4) Normal Capacity: (154.50 + 159.54 + 166.66)/3= 160.23 lakh units

(5) Idle capacity: [(219 - 158.80) = 60.20, lakh unit i.e. (60.20/219) = 27.49%

(6) Abnormal Idle capacity: (170.4375 – 158.80) = 11.6375 lakh units i.e. (11.6375/ 170.4375) =6.83%.

(c)

SINJINI LTD.

CALCULATION OF VALUE ADDITION **(Amount in ` lakh)**

	2015		2014	
Year ended March 31,				
VALUE ADDITION:				
Gross Sales including Excise Duty		5,200		4,160
Less: Excise duty etc.		400		320
Net Sales		4,800		3,840
Add: Export Incentives		-		-
Add/Less: Adjustment in Finished stocks		20		10
		4,820		3,850
Less: Cost of bought out input:				
(i) Cost of Raw materials consumed		1,760		1,440
(ii) Consumption of stores and spares		160		140
(iii) Power & Fuel		240		192
(iv) Other overheads		1,056		861
(430+36+260+20+250+60)= 1,056				
(370+30+220+16+200+25)= 861				
Total cost bought out input		3,216		2,633
(i) VALUE ADDED		1,604		1,217
Add: Other Income		300		200
(ii) Earnings Available for distribution		1,904		1,417
(iii) Distribution of earnings to:				
(1) Employees as salaries and wages, bonus, gratuity etc.		476		382
Directors- Salaries and Commission		48		40
(2) Shareholders as dividend		420		230
(3) Company as retained funds (including depreciation)		404		365
(4) Government as taxes				
Cess & Local Taxes:	120		100	
Income Taxes	316	436	200	300
(5) Providers of Capital/Fund as Interest on Debentures				
Interest on debentures	30		30	
Interest on Fixed loans from IDBI	90	120	70	100
Total distribution of earnings		**1,904**		**1,417**

(d) (i) (A) In case of leased assets, if the lease is an operating lease, the entire rentals shall be included in the administrative overhead. If he lease is a financial lease, the financial cost portion segregated and treated as finance cost.

(B) Cost of administrative services procured from outside shall be determined at invoice or agreed price including taxes and duties. And other expenditure directly attributable thereto net of discounts (other than cash discount) taxes and duties refundable or to be credited.

(C) The cost of software (developed in-house, purchased, licensed or customized) including upgradation cost shall be amortized over the estimated useful life.

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

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

(iii) Companies who have filed multiple Form 23C in respect of multiple cost auditors will be required to provide the SRN Numbers against each Form 23C filed.

In case the company after filing individual Form 23C has also filed Form CRA-2, in such case the company will be required to provide the SRN Number of the latest CRA-2 only since the details of multiple cost auditors, if applicable for the company, would be covered under one Form CRA-2.

(e) (i) The risk of material misstatement at the assertion level consists of two components as follows:-

- **"Inherent Risk"** is the susceptibility of an assertion to a misstatement that could be material, either individually or when aggregated with other misstatements, assuming that there are no related controls. The risk of such misstatement is greater for some assertions and related cost heads, items of cost and disclosures than for others. For example, complex calculations are more likely to be misstated than simple calculations. Cost heads consisting of amounts derived from cost estimates that are subject to significant measurement uncertainty pose greater risks than do cost heads consisting of relatively routine, factual data.
- **External circumstances** giving rise to business risks may also influence inherent risk. For example, technological developments might make a cause changes to a manufacturing process rendering the existing classification of variable and fixed costs inappropriate and cause product contribution to be misstated. In addition to those circumstances that are peculiar to a specific assertion, factors in the

entity and its environment that relate to several or all of the classes of cost heads, items of cost, or disclosures may influence the inherent risk related to a specific assertion. These later factors include, for example, external market constraints may cause normal capacity as an unreliable basis for determining unit costs.

- **"Control risk"** is the risk that a misstatement that could occur in an assertion and that could be material, either individually or when aggregated with other misstatements, will not be prevented, or detected and corrected, on a timely basis by the entity's internal control. That risk is a function of the effectiveness of the design and operation of internal control in achieving the entity's objectives relevant to preparation of the entity's cost statements. Some control risk will always exist because of the inherent limitations of internal control.
- **Inherent risk and control** risk are the entity's risks; they exist independently of the audit of the cost statements. The auditor is required to assess the risk of material misstatement at the assertion level as a basis for further audit procedures, though that assessment is a judgment, rather than a precise measurement of risk. When the auditor's assessment of the risk of material misstatement includes an expectation of the operating effectiveness of controls, the auditor performs tests of controls to support the risk assessment. The CAAS and GACAAPs do not ordinarily refer to inherent risk and control risk separately, but rather to a combined assessment of the "risk of material misstatement."
  Although the CAAS and GACAAPs ordinarily describe a combined assessment of the risk of material misstatement, the auditor may make separate or combined assessment of inherent and control risk depending on preferred audit techniques or methodologies and practical considerations. The assessment of the risk of material misstatement may be expressed in quantitative terms, such as in percentages, or in non-quantitative terms. In any case, the need for the auditor to make appropriate risk assessment is more important than the different approaches by which they may be made.
- **'Detection risk'** is the risk that the cost auditor will not detect a misstatement that exists in an assertion that could be material, either individually or when aggregated with other misstatements.
- **"Detection risk** is a function of the effectiveness of the audit procedure and of its application by the auditor. Detection risk cannot be reduced to zero because the auditor usually does not examine all of cost heads, items of cost, or disclosure and because of other factors. Such other factors include the possibility that a cost auditor might select an inappropriate audit procedure, misapply an appropriate audit procedure, or misinterpret the audit results. These other factors ordinarily can be addressed through adequate planning, proper assignment of personnel to the engagement team, the application of professional skepticism, and supervision and review of the audit work performed.
- **Detection risk** relates to the nature, timing, and extent of the auditor's procedures that are determined by the auditor to reduce audit risk to an acceptably level. For a given level of audit risk, the acceptable level of detection risk bears an inverse relationship to the assessment of the risk of material misstatement at the assertion level. The greater the risk of material misstatement the auditor believes exists, the less the detection risk that can be accepted. Conversely, the less risk of material misstatement the auditor believes exist, the greater the detection risk that can be accepted.

(ii) In case of a company having more than one cost auditor, it would be necessary for the company to appoint/designate one cost auditor as the lead cost auditor for consolidation of the report.

The individual cost auditors appointed for specific units/products would be required to audit and provide para numbers A-4, B-2, B-2A,B-2B, B-2C, C-1, C-2A, C-2B, C-2C (as applicable), D-1 in respect of the products/services coming under the purview of their respective audits. The individual auditors would also be required to submit to the Board of Directors the individual cost audit report as per Form of the Cost Audit Report given in CRA-3.

The lead auditor would be responsible for preparing the Para number A-3, D-2, D-3, D-4, D-5, D-6 and consolidate Para numbers A-4, B-1, B-2, B-2A, B-2B, B-2C, C-1, C-2, C-2A, C-2B, C-2C(as applicable), D-1 received from the individual cost auditors.

The consolidated report should contain the reports of all the individual cost auditors including the report of the lead cost auditor. In case individual cost auditors have any observations or suggestions or qualifications, they would be required to mention the same under Para 2 of the cost audit report and the lead auditor would have to mention the specific observations and/or qualifications of all the individual cost auditors in the place provided for the same in the under Para-A-1.

The consolidated report so prepared would be converted to XBRL and submitted to the Central Government by the Company in Form CRA-4.

(f) (i)

RECONCILIATION OF PROFIT BETWEEN COST AND FINANCIAL ACCOUNTS FOR THE YEAR ENDED MARCH 31. 2015

	`	`
Profit as per Financial Accounts:		22,14,100
Add: Loss on sale of investments	33,600	
Add: Voluntary Retirement compensation included in salary	50,25,000	
and wages in F/A - Not included in cost A/c	75,000	51,33,600
Add: Donation paid		73,47,700
Less: Profit on Sale of Fixed Assets-Not considered in cost A/c	2,05,000	
Less: Receipts of insurance claim related to previous year	5,08,700	
Less: Profit from Retail trading activity	32,02,430	
Less: Interest income from inter-corporate deposit-not considered in cost accounts	6,15,000	
Less: Difference in valuation of stock:		
Decrease in inventories as per cost accounts 3,90,12,500		
Decrease in inventories as per financial accounts 3,82,06,430	8,06,070	53,37,200
Profit as per Cost Accounts		20,10,500

(ii) Products manufactured by the company as well as conversion activity through third parties will be covered under the Companies (Cost Records and Audit) Rules 2014 and the company would be required to maintain cost accounting records and get cost audit conducted subject to threshold limits. The finished products bought from outside parties (treated as Trading Activity in Financial Accounts) would be reflected a "Cost of Finished Goods Purchased" in Abridged Cost Statement.

(iii) The cost auditor is to be appointed by the Board of Directors on recommendation of the audit committee, where the company is required to have an audit committee.

The cost auditor proposed to be appointed is required to give a letter of consent to the Board of Directors. The company shall inform the cost auditor concerned of his or its appointment as such and file a notice of such appointment with Central Government within a period of thirty days of the Board Meeting in which such appointment is made or within a period one hundred and eighty days of the commencement of financial year, whichever is earlier, through electronic mode in Form CRA-2 along with fee as specified in Companies (Registration offices and fees) Rule, 2014.

Any casual vacancy in the office of a cost auditor, whether due to resignation, death or removal, shall be filed by the Board of Directors within thirty days of occurrence of such vacancy and the company shall inform the Central Government in Form CRA-2 within thirty days of such appointment of cost auditor.

SECTION B (20 marks)

2. Answer *any two* questions. (carrying 10 marks each):

(a) (i) Explain the features of a good Internal Control System. 5

(ii) What are the needs for Operational Audit? 5

(b) (i) Management Audit and Operational Audit are Complementary and Supplementary to one another.—Discuss. 3

(ii) What is meant by 'Social Responsibility Management'? Briefly list the different types of pollution for which a manufacturing company is responsible. 2+5=7

(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

Answer:

2. (a) (i) **A good internal control system should possess the following feature:-**

1. **Proper organization structure:**
   (a) A good internal control system should involve segregation of duties in such a manner that error or fraud cannot take place.
   (b) Proper division of duties, with respect to access to assets, authorization of transaction, execution of transactions and record keeping should be based on the organization structure.
2. Scheme of authorization and procedures: A good internal control system should define proper authorizations and procedures. The scheme of authorization should ensure that-
   (a) Every transaction is duly authorized by the competent official
   (b) Every transaction is properly accounted in the books, and
   (c) Supervisory procedures are laid down based on the responsibilities of each official
3. **Internal Check:**
   (a) Accounting procedures should be designed in such a manner that no single person is authorized to carry out all the operations involved in a transaction.
   (b) The system should institute a prompt and independent verification of an

individual's work by prescribing cross-checks and cross-reconciliations as a part of the operating procedure itself and also provide for complimentary allocation of duties.

4. **Suitable personnel:**
   (a) Competent and honest persons alone should be employed in the organization so that the system operates effectively.
   (b) The qualification, experience and personal characteristics of the personnel involved are important in establishing and maintaining a system of internal control.

5. **Internal Audit System**
   a) The Management may establish an internal Audit Department and delegate some of its supervisory functions like review of internal control.
   b) Internal Audit constitutes a separate component of internal control system undertaken by specially assigned staff with the objective of determining whether internal controls are well designed and operating properly.

(ii) **Need for Operational Audit:**

Operational Audit overcomes the following problems/gaps faced by the Management in operational areas:-

1. **Information needs**: Managers require full objective and current information about conditions prevalent in their operational areas, and also in areas beyond their direct observation. Operational Audit provides the required information to them.

2. **Fill up Communication Gaps**: Conventional sources of Management Information are-
   (a) Departmental Manager's routine performance report
   (b) Internal Audit Reports,
   (c) Periodic special investigation, and
   (d) Survey.
   These sources create communication gaps on activities, which do not come under the direct observation of managers. Hence, operational audit is required.

3. **Effectiveness of Managers**: Executives and Managers are too pre-occupied with implementation of plans and achieving targets. They are left with very little time to collect information and locate problems. Hence, an independent operational audit team should provide them data inputs on the effectiveness of operations.

4. **Undetected Cracks**: Even when a department is working well and smoothly, there may be some crack or gap in operations or in controls. Operational audit is a management information source since it will find out the possibilities of such undetected gaps/ lapses in control.

5. **Analytical Evaluation**: Departmental Managers and their aides generally routine transmit information. But an Independent Operational Audit Team will be able to evaluate the operations analytically.

6. **Unbiased Reports**: Performance Reports contained in the annual accounts and routine reports prepared by the operating departments have their own limitations, may be subjective, manipulated or biased. Hence, operational audit is required.

7. **Shortcoming of internal Audit**: Conventional Internal Audit reports are often routine and mechanical in character and have definite leaning towards

accounting and financial information. They are historical in nature. Operational audit overcomes this limitation of internal audit.

8. **Need for current control**: Surveys and special investigations are occasional in character. They are costly, time consuming and keep the departmental key personnel busy during that period. They are undertaken mostly to find causes of certain affairs or to fix responsibility rather to give a signal for dangers and forthcoming disasters. Operational Audit is required to ensure day-to-day control of activities.

9. **Environmental Changes**: Operational audit is required to analyse whether the activities, operations, procedures, methods and objectives of the enterprise are in tune with its present environmental conditions. There is a need for an instrument, which should signal change in advance.

(b) (i) Management Audit is that it is wider in scope compared to operational audit. Management Audit is concerned with the quality of managing, where as operational audit centres on the quality of operation.

The basic difference between the two audits is not in method, but in the level of appraisal. In management Audit, the auditor is to take his tests to the level of top management, its formulations of objectives, plan and policies and its decision making. It is not that he just verifies the operation of control and procedure and fulfillment of plans in conformity with the prescribed policies. Thus two audits are complementary and supplementary to one another.

(ii) **Corporate Social Responsibility:**

As part of the infrastructure requirements for running any business or manufacturing industry, a company has to depend on the Society and community of people living in the area in which the factory is situated. Therefore, the company owes a duty and responsibility for ensuring that the normal life of the community is not affected by the manufacturing process. Although the Government of the state and the Central Government have enacted legislations for prevention of environmental pollution and provision of safety measures, the company on its own should take measures for community development besides protection of environment. Many companies provide medical facilities and run educational institutions not only for their own employees, but also for the public in general in the areas in which they are operating. This is termed as "corporate social responsibility".

The following are some of the types of pollution which need to be prevented or controlled:-

(a) **Air Pollution**- caused by burning or letting out of chemicals in the air leads to respiratory diseases.

(b) **Water Pollution** - caused by letting out of effluents in water bodies or agricultural lands by industries like Tanneries, Dyeing units etc. result in contamination of ground water making it unsuitable for human consumption and in pollution of quality of soil affecting agriculture.

(c) **Noise Pollution**- by the running of heavy industries water well drilling etc. lead to loss of hearing and psychological disorders.

(d) **Radiation Pollution**- caused by Nuclear Power Plants will affect the health of the people living in the vicinity.

(e) **Smell Pollution** - Discharge of industrial products unclear dumps open sewers etc. It affects well being and even causes psychological dis-orders.

(f) **Visual Pollution**- Effluents from chemical plants and washeries are discharged into waterways causing reduced visibility. Industrial fumes and dust causing loss of landscape attractiveness and strain to vision of pedestrians and motorists may cause more road accidents and traffic.

(g) **Thermal pollution** - Thermal pollution is radiation of heat generated by plants in industries. Warmer temperatures lower dissolved oxygen content and cause aquatic organisms to increase their respiration rates consume oxygen faster and increase their susceptibility to disease, parasites, and toxic chemicals. Thermal pollution affects ecological balance and thereby the inhabitants.

(h) **Climate pollution** - Radiation of heat in highly industrial centres leading to "micro climate zones" causing deforestation, shortening plants growth and affecting surroundings. It affects ecological balance and causes damages to plant and surroundings.

(i) **Soil/land pollution** - Indiscriminate use of fertilizers and pesticides, pollution of soil with man-made chemicals, indiscriminate disposal of solid use etc. Due to pollution the quality of soil deteriorates to the extent that they fail to support vegetation. It affects global climate also.

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

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

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

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

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

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

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

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

(viii) Is there excess or shortage of manpower? How is the control exercised-time and motion study, incentives, labour budgets or any other means?

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

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

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

(xii) How is the control exercised an inventory of stores and spares?

(xiii) What is the procedure to handle breakdown emergencies?

(xiv) Are all statutory requirements in regard of safety measures complied with?

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

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

SECTION C (20 marks)

3. Answer *any two* questions. (carrying 10 marks each):

(a) Explain the impact of IFRS on the Cost Structure, Cash flows and Profitability. 10

(b) BIDHISHREE LTD. manufactures and sells a single product. During the year 2014-15, it earned a sales revenue of ` 5,040 lakhs based on a 20% profit on selling price. The product requires 30 pieces of material P and 15 pieces of material Q for manufacture as well as an operation time of 700 hours in the Machine Shop and 250 hours in the Assembly Section. Overheads are absorbed at a blanket rate of 33-1/3% on Direct Labour. The factory worked 5 days of 8 hours a week in a normal 52 weeks a year. The statutory holidays, leave and absenteeism and idle time amounted to 96 hours, 80 hours and 64 hours respectively, in the year.

The other details available from the Cost Accounting records of the company are as under:

Purchase Price	Material P	` 2,400 per piece
	Material Q	` 1,600 per piece
Comprehensive Labour Rate	Machine Shop	` 160 per hour
	Assembly	` 128 per hour
Number of Employees	Machine Shop	600
	Assembly	180

	Finished Product Stock	Materials P	Materials Q
Opening Stock	200 units	5,400 Pcs.	3,300 Pcs.
Closing Stock	250 units	3,000 Pcs.	6,600 Pcs.

As a Cost auditor of the company, you are required to:

(i) Verify the number of units of the product manufactured (1,450 as per ledger) and sold (1,400 as per ledger).

(ii) Verify the purchases made of Materials P (` 986.40 lakh) and Q (` 400.80 lakh) during the year as per purchases ledger.

(iii) Compute the capacity utilisation of Machine Shop and Assembly Section. 4+4+2=10

(c) The following are the Summarised Balance Sheet and Income Statement of SATCON LTD.:

Income Statement for the year ended 31.03.2015	
	(Amount in ` lakh)
Sales	3,200
(-) Cost of goods sold	2,620
Gross Margin	580
Less: Selling and Administrative expenses	80
	500
Less: Interest expense	90
Earnings before tax	410
Tax paid	164
Earning After Tax	246
Earnings Per Share (EPS) ` 3.075	

Balance Sheet as at 31.03.2015

(Amount in ` lakh)

Equity & Liabilities	`	Assets	`
(1) Shareholders' Fund:		(1) Non-current Assets:	
(a) Share Capital		(a) Net Fixed Assets	1,600
(i) Paid up Capital (80,00,000 Shares of ` 10 each fully paid)	800		
		(2) Current Assets:	
(b) Reserve and Surplus		(a) Inventory	800
(i) Retained Earnings	240	(b) Trade Receivables	350
		(c) Marketable Securities	150
(2) Non-Current Liabilities:		(d) Cash	100
Long Term Borrowing			
(i) Debenture	1,400		
(3) Current Liabilities:			
(a) Trade payables	360		
(b) Bills Payable	160		
(c) Other Current Liabilities	40		
	3,000		3,000
Market Price per share ` 15			
Industry's average ratios are:			
Current ratio			2.4
Quick ratio			1.5
Sales to Inventory			8
Average Collection Period			36 days
Times Interest Earned			6
Profit margin			7%
Price to Earning Ratio			15
Return on total assets			11%

SATCON LTD. would like to borrow ` 1,000 lakh from a bank for less than a year.

Required:

Evaluate the current financial position of Satcon Ltd. by calculating Ratios that you feel would be useful for the bank's evaluation. **10**

Answer:

3. (a) The new era of accounting standards has started in India after introduction of IND AS. The Ministry Corporate Affairs had notified 39 new Ind AS in 2015. The timeline for the adoption of these new standards is not yet given. The date had been postponed in view of pending the suitable amendments required to be done in the other enactments.

However, it will be useful for the cost auditor to run through the effects that the new standard may have on the organizations in the new ear. The cost auditor should get acquainted with the requirements of the new standards and the differences as compared to the existing standards. In the performance appraisal report, the cost auditor may point out the impact of IFRS on the existing cost structure, cash flows, and profitably. If may be noted that the new standards provide a principle based framework in place of rule based standards, and as such the companies may need to assess the effect of their actions and choices made for accounting.

The five main elements of financial statements are assets, liabilities, equity, income and expenses. The IFRS provide for recognition, measurement and disclosure criteria for these elements. In cases, where the measurement criteria change, there will be an impact on the costs. The changed recognition criteria may impact the profitability and cash flows of the company.

The most important effect on valuation will happen through the adoption of "fair value" concept in measuring various assets and liabilities. The cost auditor must enumerate the cases where use of fair value is mandatory or permitted as management's choice. It should be noted that any change in the fair value as on the reporting date has to be taken to the profit and loss A/c.

It may be possible to split effect of new standards on individual product or product group costs and profitability. It could be assessed for the organization as a whole.

These effects arise due to the balance sheet orientation of IFRS rather than the P&L smoothing practices followed by companies. Given below is an illustrative list of areas where major impact would be arising out of the IFRS provision related to:

- **Revenue recognition**-companies may have to defer part or whole of their revenues.
- **Inventory valuation**-explicit rejection of LIFO method could change the inventory costs and thus profitability.
- **Property, plant and equipment**- recognition of assets and depreciation may change, provisions on revaluation of assets are noteworthy.
- **Financial instruments** accounting for hedges and FOREX may result in profits or losses to be recognized or derecognized.
- **Construction contracts**- there could be changes in contract revenues and profit measurements thereon.
- **Impairment of assets**- recognition of provisions may impact profitability.
- **Intangible assets**- certain existing assets may have to be derecognized.
- **Business combinations**- some costs of M&A cannot be capitalized.

The impact of changeover has been explained in the Ind AS-101-First Time Adoption. It may be noted that the impact based on this standard would be in the first year in which the new standards are applied. In the first financial statements, the adjustments will have to be made in the retained earnings, subject to some exceptions and exemptions. This standard may require an entity to

(a) Recognise all assets and liabilities whose recognition is required by Ind AS
(b) Not to recognize items as assets or liabilities if Ind As do not permit such recognition;
(c) Reclassify items that it recognized under previous GAAP as one type of asset, liability or component of equity, but are a different type of asset, liability or component of equity under Ind As and
(d) Apply Ind ASs in measuring all recognized assets and liabilities

The Performance Appraisal Report should include comments of the potential changes for the understanding of the Board and Audit Committee members. The cost auditor could provide them an insight to the likely changes in the cost structure. This content area is an important aspect to be covered till the new standards are not adopted. In subsequent years, it may lose its relevance.

(b)

B IDHISHREE LTD.

As total sales revenue is given, number of units sold can be found out by dividing sales revenue with selling price per unit.

Selling price per unit

	`	`
Materials cost:		
P (30 Pieces × ` 2,400)	72,000	
Q (15 pieces × ` 1,600)	24,000	96,000
Labour cost:		
Machine shop (700 hours x `160)	1,12,000	
Assembly (250 hours x ` 128)	32,000	1,44,000
Overheads (33-1/3% of direct labour cost)		48,000
Total cost of production		2,88,000
Profit (20% on selling price or 25% of cost)		72,000
Selling price per unit		3,60,000

(i) Verification of product sold and manufactured

	`	`
1. Total Sales revenue		5040 lakh
2. Selling price per unit		3.60 lakh
3. Number of units of the product (1/2)		1400 units
This is the same as per sales ledger		
4. Add: Difference in opening and closing stock		50 units
5. Number of units of the product manufactured		1450 units
This is the same as per ledger.		

(ii) First find out materials consumed. This is worked out by multiplying production with pieces required for manufacture of each product.

	`	`
Materials consumed -P 1450 units x 30 pieces=		43500 pieces
-Q 1450 units x 15 pieces=		21750 pieces
	Materials P	Materials Q

	(Pieces)	(Pieces)
Materials consumed	43,500	21,750
Add: Closing stock	3,000	6,600
Total	46,500	28,350
Less: Opening stock	5,400	3,300
Materials purchased (pieces)	41,100	25,050
Purchase piece per piece (`)	2,400	1,600
Purchases in value (during the year) (`)	9,86,40,000	4,00,80,000
(These are the same as shown in the purchase ledger)		

(iii) Practical Available Hours

			Hours
Working hours during the year (52 weeks x 5 days x 8 hrs)			2080
Less: Statutory holidays, leave and absenteeism (96hrs+80 hrs+64 hrs)			240
Practical hours available			1840
		Machine shop	Assembly section
1.	Practical hours available	1840	1840
2.	Number of employees shop-wise	600	180
3.	Total available hours (1×2)	1104000	331200
4.	Number of the products manufactured	1450	1450
5.	Operation time per number (Hours)	700	250
6.	Production hours used (4x5)	1015000	362500
7.	Capacity utilization (6/3)x100	91.94%	109.45%

Comments: There is an under utilization of Machine Shop. Immediate steps should be taken to correct this imbalance.

(c)

SATCON LTD.

Before granting short term loan, the bank should consider liquidity position, profitability position and interest payment ability of the firm. So let us calculate the requisite Ratios for this purpose:

Ratio	Formula used	Value of ratio of Satcon Ltd.	Industry's average ratio	Remarks
(A) Liquid Ratio				
(i) Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	(1400/560) =2.5	2.4	Above standard
(ii) Quick Ratio	$\frac{\text{Current Assets - Inventory}}{\text{Current Liabilities}}$	(600)/560 = 1.07	1.5	Below standard
(iii) Inventory Turnover Ratio	$\frac{\text{Cost of goods Sold}}{\text{Inventory}}$	(2620/800) = 3.28	8	Below standard
(iv) Average Collection Period	$\frac{\text{Trade Receivables} \times 365 \text{ days}}{\text{Sales}}$	(350)/(3200)x 365= 40 days	36 days	4 days longer
(B) Profitability Ratio				

(i) Profit Margin	$\frac{\text{Net Income after tax} \times 100}{\text{Sales}}$	[(246)×100/ 3200 = 7.69%	7%	Above the standard
(ii) Price to Earnings Ratio	$\frac{\text{Market Price Per Share}}{\text{Earning per share}}$	(15/3.075) =4.88	15	Below standard
(iii) Return on total Assets	$\frac{\text{Net Profit after tax}}{\text{Total Assets}}$	(246)/3000 =8.2%	11%	Below standard
(C) Coverage Ratio				
(i) Interest Coverage Ratio	$\frac{\text{Profit before interest and tax}}{\text{Interest}}$	(500)/90 =5.56 times	6	Near to standard

Comments on the liquidity, profitability and interest payment capacity of SATCON LTD:

Liquidity Position: The current ratio of Satcon Ltd. is little-bit higher than industry's average ratio. So it may be thought that liquidity position of the firm is sound. But if we look at the quick ratio, we will see that the position is not at all satisfactory. The quick ratio of Satcon Ltd. is lower than industry's average ratio by as much as (1.5-1.07)/1.5)= 28.67%. Clearly this has resulted in due to high inventory holding which is around 57.14% of total current assets. That inventory holding is disproportionately high which is evident from inventory turnover ratio. While the industry's average inventory turnover ratio is 8, it is only 3.28 in case of Satcon Ltd.. This poor turnover ratio indicates a very inefficient inventory management. The company is holding either excessive inventory than warranted by volume of production or a huge quantity of slow-moving and non-moving inventory. The liquidity position of Satcon Ltd. is further strained by 4 days longer debt collection period than the industry's average.

Profitability Position: The profit margin ratio of Satcon Ltd. is slightly better than industry's average. But the return on total assets of the company is far below the industry's average. It is only 8.2% while it should be around 11% as per industry norm. It indicates that Satcon Ltd. is less efficient in utilizing its assets compared to industry average. So to make the return on total assets at par with industry average, Satcon Ltd. has to either reduce the investment in total assets or increase sales volume. The price-earnings ratio of Satcon Ltd. is too lower compared with the industry's average. It indicates that investors' evaluation about the prospect of the firm is very poor.

Interest Payment Capacity: Interest payment capacity of Satcon Ltd. is satisfactory as the interest coverage Ratio is near to industry's average.

Conclusion: It appears that if inventory of Satcon Ltd. is properly managed and debt collection becomes more prompt, the necessary of the short term loan may not exist. Moreover, it should not be lost sight of that current ratio and quick ratio will be further worsened if this loan is granted. They will be then as follows:-

Current ratio = $\frac{1400+1000}{(560+1000)}$ = 1.54

Quick ratio = $\frac{1600}{1560}$ = 1.03.

So before granting loan bank should consider the above facts very carefully.