

**FINAL EXAMINATION
GROUP - IV
(SYLLABUS 2016)**

SUGGESTED ANSWERS TO QUESTIONS

JUNE - 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, 1 mark for justification/workings. 2x10=20)
- (i) Part C of the Annexure to the Cost Audit Report in CRA 3 deals with _____.
- (a) Manufacturing Sector
 - (b) Service Sector
 - (c) Regulated Sector
 - (d) Unregulated Sector
- (ii) Cost Accounting Standard 8 is a Cost Accounting Standard on _____.
- (a) Employee Cost
 - (b) Utilities Cost
 - (c) Pollution Control Cost
 - (d) Selling and Distribution Cost
- (iii) Under the Generally Accepted Cost Accounting Principles, the cost of cane supplied from own farm to the sugar mill is treated as _____.
- (a) Direct Materials Cost
 - (b) Indirect Materials Cost
 - (c) Production Overhead
 - (d) Administrative Overhead
- (iv) Constitution of Audit Committee by the Board of Directors is mandatory for _____.
- (a) all companies
 - (b) all listed companies only
 - (c) all listed companies and those prescribed under the Companies (Meetings of Board and its Powers) Rules only
 - (d) all public companies having turnover of ₹100 crore or more only
- (v) Cost Auditing Standard 102 deals with _____.
- (a) planning an Audit of Cost Statements
 - (b) Cost Audit Documentation
 - (c) knowledge of process and business
 - (d) overall objectives of the Independent Cost Auditor
- (vi) As per the Central Excise Valuation Rules 2000, the assessable value of goods used for captive consumption is _____.
- (a) at actual cost of production of such goods
 - (b) at marginal cost of production of such goods
 - (c) at 110% of cost of production of such goods
 - (d) at market price of such goods
- (vii) A cotton textile mill had cumulative waste percentage of 8% in Blow Room, 6% in Carding, 4% in Drawing, 4% in Simplex and 9% in Ring Frame. For an input of 1000 kg.

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

- of cotton in Blow Room, the output at Ring Frame is _____.
- (a) 730.27 kg.
 - (b) 725.27 kg.
 - (c) 742.27 kg.
 - (d) 749.97 kg.
- (viii) 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
- (ix) A shoe manufacturing company has a plant capacity of producing 700 shoes per shift. During the year of 300 working days, 3 shifts of 8 hours with half-hour recess per shift, it produces 35.91 lakh shoes. The Normal Capacity Utilization percentage is ____.
- (a) 82%
 - (b) 76%
 - (c) 74%
 - (d) 78%
- (x) Propriety Audit in the context of Government Audit seeks to ensure that _____.
- (a) public money are not spent for the benefit of a particular person
 - (b) public officer should exercise same vigilance as in respect of expenditure of his/her own money
 - (c) no authority should pass an order which will be directly or indirectly to its own advantage
 - (d) All the above

Answer:

1. (i) (B) Service Sector
Reason: Part C of the Annexure to the Cost Audit Report in Form CRA 3 pursuant to the Rule 6(4) of the Companies (Cost Records and Audit) Rules, 2014, gives quantitative information and abridged cost statement for services in the Service Sector.
- (ii) (B) Utilities Cost
Reason: CAS 8 deals with the Cost Accounting Standard on cost of utilities.
- (iii) (A) Direct Material Cost
Reason: As per the GACAP, Direct Materials Cost includes cost of procurement and freight inwards of the materials.
- (iv) (C) All listed companies and those prescribed under the Companies (Meetings of Board and its Powers) Rules only
Reason: The Rule covers all listed companies, public companies having capital of ₹10 crore and more, annual turnover of ₹100 crore and more, outstanding deposits, loans and borrowings of ₹50 crore or more.
- (v) (B) Cost Audit Documentation
Reason: The Cost Auditing Standard 102 is to provide guidance to the members in the preparation of audit documentation in the context of the audit of cost statements, records and other related documents.
- (vi) (C) At 110% of cost of production of such goods
Reason: Liability of Excise Duty arises as soon as the goods covered under the Excise Duty are manufactured but the Excise Duty is collected at the time of removal or clearance from the place of manufacture even for captive consumption.
- (vii) (B) 725.27 kgs.
Reason: Output at Ring Frame = $1000 \times (100-92)\% \times (100-94)\% \times (100-96)\% \times (100-96)\% \times (100-91)\% = 725.27$ kgs.
- (viii) (C) risk identification, process improvement
Reason: The objective is to assist the organization in performing the functions more effectively and economically with focus on the efficiency and the

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

- effectiveness of the operations, giving an early warning system for the detection of the potentially-destructive problems.
- (ix) (B) 76%
Reason: Available capacity = $300 \times (8-0.5) \times 3 \times 700 = 47.25$ lakh units
Actual Capacity Utilization % = $35.91/47.25 = 76\%$
- (x) (D) All the above
Reason: The objective of Propriety Audit is that public money is not spent for the benefit of a particular person. Public officer should exercise same vigilance as in respect of expenditure of his/her own money and no authority should pass an order which will be directly or indirectly to its own advantage.

Section - B (80 marks)

2. (a) What is meant by 'Normal Price' with reference to 'Related Party Transaction' in CRA 1? State the basis adopted to determine 'Normal Price'. 8
- (b) Mr. P. Swamy, the Cost Auditor of PQR Ltd. for the FY 2016-17, was offered an assignment of Investment Consultant of RST Ltd., a subsidiary of PQR Ltd., for the same year.
- (i) Whether the acceptance of the assignment amounts to violation of law and professional misconduct?
- (ii) What are the penal provisions, if any? (Mention the relevant provisions.) 4+4=8

Answer:

2. (a) As per Para 24 (b) of the CRA 1, "Normal Price" means price charged for comparable and similar products in the ordinary course of trade and commerce where the price charged is the sole consideration of sale and such sale is not made to a related party. Normal Price can be construed to be a price at which two unrelated and non-desperate parties would agree to a transaction and where such transaction is not clouded due to the proximity of the parties to the transaction and is free from influence through the parties may have shared interest. In the context of the basis adopted to determine Normal Price, the methods stated below are relevant.
- (i) Comparable Uncontrolled Price method
(ii) Resale Price method
(iii) Cost-plus method
(iv) Profit Split method
(v) Transactional Net Margin method
(vi) Any other method, to be specified
- (b) (i) Any person who is engaged in consulting and providing specialized services to a company and its subsidiary companies is not eligible to act as Cost Auditor [Section 141 of the Companies Act, 2013, read with Companies (Audit and Auditors) Rules, 2014]. The Cost Auditor cannot accept the assignment as long as he/she remains appointed as the Cost Auditor of the company.

A member of the institute, whether in practice or not, shall be deemed to be guilty of other misconduct, if— (1) he is held guilty by any civil or criminal court for an offence which is punishable with imprisonment for a term not exceeding six months; (2) in the opinion of the Council he brings disrepute to the profession or the institute as a result of his action whether or not related to his professional work.[Part IV, The First Schedule]

A member of the Institute, whether in practice or not, shall be deemed to be guilty of other misconduct, if he is held guilty by any civil or criminal court for an offence

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

which is punishable with imprisonment for a term exceeding six months.[Part III, The Second Schedule]

- (ii) If an auditor has contravened the provisions of the Companies Act, 2013, he/she shall be punishable with fine which shall not be less than twenty five thousand rupees but which may extend up to five lakh rupees. When the auditor has contravened knowingly or willfully with the intention to deceive the company or its shareholders or creditors or tax authorities, he/she shall be punishable with imprisonment for a term which may extend to one year and with fine, which shall not be less than one lakh rupees but which may extend up to twenty-five lakh rupees. When the auditor has been convicted as above, he/she shall be liable to refund the remuneration received and pay for the damages to the company, statutory body or to any other person for the loss arising out of incorrect statement made in his/her report [Section 147 of the Act].

A member of the Institute, whether in practice or not, shall be deemed to be guilty of other misconduct, if he/she is held guilty by any civil or criminal court for an offence which is punishable with imprisonment for a term exceeding six months [The Second Schedule, Part III of the Cost and Works Accountants Act, 1959].

3. (a) While commencing Cost Audit of a manufacturing company, how the Auditor would assess the risk of material misstatement? 8

(b) Autoparts Manufacturing Company Ltd. showed a profit for the year 2016-17 as ₹ 35,46,700. During the course of Cost Audit, the followings transactions were noticed:

- (i) an old machine with net value of ₹ 6,54,000 was sold off for ₹ 9,30,000,
- (ii) dividend income was received amounting to ₹ 84,500 from investments,
- (iii) a sum of ₹ 58,000 was spent towards CSR commitment,
- (iv) the company was engaged in trading activity where purchase of goods was ₹ 13,50,000 and sales was ₹ 13,42,300, after incurring ₹ 40,800 as expenditure,
- (v) some renovation work was carried out at a cost of ₹ 7,75,000 and its useful life was only for five years, and
- (vi) the closing inventory of raw material was undervalued ₹ 29,600 and that of finished goods was overvalued ₹ 65,400 in the financial records. Work out the Profit as per the Cost Accounts. 8

Answer:

3. (a) Cost Audit Standard 101 explains the situation when the Cost Auditor expresses an inappropriate audit opinion on the cost statements that are materially misstated. Misstatements are the differences between the actual figures and the desired amounts, classifications, presentations, or disclosures that, in the Cost Auditor's judgment, are necessary for the cost statements to be presented fairly in all material respects or to give a true and fair view.

For assessment of the risk, the audit strategy is formulated to obtain an understanding of the entity and its environment, including the entity's internal control, to identify and assess the risks of material misstatement, whether due to fraud or error, at the overall cost statement level and at the assertion level including items of cost, cost heads and disclosures thereof.

In formulating the overall audit strategy, the Cost Auditor shall consider all the relevant factors stated below.

- (a) The cost reporting framework generally prescribed, under the Companies Act and the Rules on the basis of which the cost information to be audited has been prepared, including need for reconciliation with the financial reporting framework
- (b) Industry regulators' requirement as to how costs will be handled

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

- (c) Unique features of an industry that influence audit requirements, such as definition of product in the newspaper industry
- (d) Reliance that can be placed on the work of financial auditors, other cost auditors appointed by the entity and internal auditors
- (e) State of IT (information technology) implementation
- (f) Statutory timelines for Cost Reporting
- (g) Timelines for Board/Audit Committee meetings, which can set the time limits for completion of audit work
- (h) Resources required and available in terms of manpower, equipment and others and the assignment of these to specified parts of the work,

The Cost Auditor shall then

- (i) develop an audit plan which will include the nature, extent and timing of risk assessment, audit procedures and other activities,
- (ii) shall update the overall audit strategy and the audit plan as required during the course of audit, and
- (iii) shall document the overall audit strategy, the audit plan and any significant changes made therein during the audit engagements and the reasons for the changes.

In case of deviations from the prescribed accounting and internal control system, if the Cost Auditor concludes that the deviations are such that the preliminary assessment of risk persists, he/she would amend the plan, the timing and the extent of his/her plan and the substantive procedure. He/she would report the deficiencies to the management and if no remedial action is taken, report the same in the Report.

- (b)** Reconciliation of the Cost Accounts and the Financial Accounts of Auto parts Manufacturing Company Ltd.

	₹	₹
Profit as per the Financial Accounts		35,46,700
Add Trading Loss	48,500	
Add 4/5 th of Renovation Expenses Amortized	6,20,000	
		6,68,500
Less Profit on Sale of Assets	2,76,000	
Income from Investments	84,500	
CSR Contribution	58,000	
Effect of Undervaluation/Overvaluation of closing Inventory	35,800	4,54,300
Profit as per the Cost Accounts		37,60,900

4. (a) Discuss

- (i) the areas of 'Corporate Services' and
- (ii) the evaluation criteria used in 'Corporate Services Audit'. **4+4=8**

- (b) What is Corporate Social Responsibility (CSR) Committee and its role as per the Companies Act, 2013? Describe the coverage of a CSR Audit Programme. 8**

Answer:

- 4. (a) (i)** The areas of the 'Corporate Services' are the support infrastructure of a company. The activities in such areas are stated below.
- Combine or consolidate certain enterprise-wide needed support services provided based on specialized knowledge, best practices, and technology
 - Serve internal (and sometimes external) customers and business partners
 - co-ordinate the diverse organizational units and help them to focus on organizational goals
 - exploit resources and develop core competencies that enable an organization to keep its edge over its industry competitors

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

- combining operations with another competitor in the same industry to increase competitive strengths and lower competition among the industry rivals

The business world is now becoming increasingly information intensive and complex and, therefore, companies have begun to incorporate web-based services into the work place. These include public relations, customer assistance or call centers, training, engineering, human resources and procurement, etc., to create new business value and help the company function more effectively by improving the internal processes, managing the customer relationships and extending the organization. The benefits of these services extend to core business areas in form of (a) reduced costs, (b) less inventory, (c) less working capital requirements, (d) improved procurements and higher profits, and (e) higher efficiency and productivity of the employees as new technologies can introduce an array of new possibilities with powerful computers and integration of database with web technologies.

- (ii) The appraisal system of the 'Corporate Services Audit' should consider the level of contribution a business entity makes to society and its business environment towards raising the quality of life through better product quality and services rather than profit maximization. The 'corporate services audit', thus, attempts to distinguish between the ends (i.e., profits) and means (i.e., services) of business and provides a new dimension to the concept of audit approach. It is the fulfillment of the social responsibilities of a business unit. Auditor's responsibility lies in evaluating the company's response to the social needs. The focus should be on:

Target Stakeholder	Corporate Service focus
Consumer	quality goods in proper price
Employee	pay, training, safety, welfare
Shareholders	safety of investment, good return
Community	public relations, social cost, social benefit
Fellow Business	business ethics, fair trade
State	compliance of law, fair trade, no evasion of tax

- (b) As per the Section 135(1) of the Companies Act, 2013, every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility (CSR) Committee of the Board consisting of three or more directors, out of which, at least, one director shall be an independent director.

In terms of the Section 135(5) of the Act read with Companies (Corporate Social Responsibility Policy) Rules, 2014, the company, in pursuance of the recommendations of the CSR Committee of the Board and as per the declared CSR Policy of the company, spends, in every financial year, at least, two per cent. of the average net profits of the company made during the three immediately preceding financial years subject to the condition that such policy will cover the subjects enumerated in the Schedule VII of the Act.

In Schedule VII, the following items and entries are illustrative:

- eradicating hunger, poverty and malnutrition, safe drinking water,
- promoting education, vocation skills among children, women, elderly persons
- promoting gender equality, empowering women, setting up homes, hostels for women and orphans, old age homes, day care centers, etc.
- environmental and ecological balance, protection of flora and fauna
- protection of national heritage, art and culture, etc.

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

(vi) measures for the benefit of armed forces veterans, war widows, etc.

Through there is no mandatory requirement for CSR Audit, yet a CSR Audit programme will form part of the Management Audit and may cover all or any of the following:

- effectiveness of the operating framework for CSR implementation,
- effectiveness of implementation of specific, large CSR projects,
- adequacy of internal control and review mechanisms,
- reliability of measures of performance, and
- management of risks associated with external factors like regulatory compliance, management of adverse or potentially adverse NGO attention, etc.

CSR Audit and review will in nutshell look for the following:

- ensuring compliance with the Act,
- evaluating internal control and governance framework,
- assessing the CSR project life cycle, and
- conducting financial review of the project to confirm the utilization of budgets for achieving desired outcomes.

5. (a) (i) What are the mandatory requirements for appointment of Internal Auditor in a listed company?

(ii) Who are the persons eligible for appointment as Internal Auditor? 4+4=8

(b) You have been appointed as an Internal Auditor for CENVAT Audit of Kwaliti Alloy Ltd. which is a large manufacturing concern. Draft a suitable audit programme for the above. 8

Answer:

5. (a) (i) Rule 13 of the Companies (Accounts) Rules, 2014, makes it mandatory to appoint an Internal Auditor for every listed company.

The Board of Directors of every listed company shall appoint an Audit Committee [Rule 6 of the Companies (Meetings of Board and its Powers) Rules]. It is the responsibility of the Audit Committee of a listed company to review the adequacy of the internal audit functions and review the Internal Audit Reports (Clause 49 of the Listing Agreement).

(ii) In terms of Section 138 of the Companies Act, 2013, read with Rule 13 of the Companies (Accounts) Rules, 2014,

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

shall appoint (i) an individual or (ii) a firm of Internal Auditors as the Internal Auditor of the company. Such person or firm shall either be a Chartered Accountant or a Cost Accountant, or such other professional as may be decided by the Board to conduct the internal audit of the functions and activities of the

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

company.

- (b) While drafting Audit Programme for CENVAT Audit the Internal Auditor should keep in mind various factors such as examine the controls and procedures for accounting and claim in respect of Cenvat on eligible inputs – particularly examine the cases where Cenvat could not be claimed due to various reasons i.e. non-eligible items, loss of documents etc.

The following aspects need to be checked during audit:

- (i) Type of industry
- (ii) Principal raw materials used and the input output ration of the raw materials.
- (iii) Percentage of scrap/waste /loss and its comparison with standard and actual.
- (iv) Value of input for which the CENVAT credit availed and the value of input consumed in the product/manufacture.
- (v) In case of consumables for which CENVAT has been availed, whether expenses charged to revenue are gross or net of CENVAT.
- (vi) In case of capital goods for which CENVAT has been availed whether depreciation has been claimed on the element of CENVAT included in the cost of capital goods. The auditor needs to ensure that cost of the asset is capitalised in the books net of such CENVAT and depreciation is claimed on the net amount only.
- (vii) Procedure adopted for payment of duty on goods sent to sub-contractors/other factories of the Assessee.
- (viii) Material receipts to be checked to ensure that the material receipt register (at the gate / stores) contains record reference of CENVAT documents. Also to be examined the normal time lag between receipt of material and availing of CENVAT credit.
- (ix) Records maintained or prepared by him in terms of sub rule (2) of Central Excise Rules, 2002.
- (x) The cost audit reports, if any, under Section 148 of the Companies Act, 2013
- (xi) The Income Tax Audit reports, if any, submitted under Section 44 AB of Income Tax Act, 1961.
- (xii) Excise Reconciliation Statement.
- (xiii) In certain clients, data in respect of CENVAT not claimed on inputs if not readily available, which may be a management issue for advising the client in strengthening the overall control over accounting in respect of CENVAT.
- (xiv) Abnormal delays in availing CENVAT credit may be a management issue and may offer opportunities for advising the client for streamlining the processes.
- (xv) CENVAT records
 - (i) PLA register
 - (ii) Amount claimed and claimable against Raw Materials and Capital Goods
 - (iii) Summary statement of CENVAT Credit
 - (iv) Vender Invoice, etc.
 - (v) Review and checking of the documents relating to notices/show causes/ litigation matters in respect of CENVAT Audit

6. (a) The financial position of Hind Automobiles Ltd. for the years 2016-17 and 2015-16 are given below. From the figures, find (i) Capital Employed, (ii) Debt-Equity Ratio, (iii) Proprietary Ratio, and (iv) Current Ratio.

(₹ in '000)					
Liabilities	31.03.17	31.03.16	Assets	31.03.17	31.03.16
Capital (Equity)	600	600	Fixed Assets	2400	1800
General Reserves	414	326	Less: Depreciation	840	600
Revaluation Reserve	110	125	Net Fixed Assets	1560	1200
Profit/Loss A/c Balance	122	54	Stock	720	600
Loan-Secured	385	467	Sundry Debtors	410	300
Loan-Unsecured	655	128	Cash & Bank Balances	180	120

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

Sundry Creditors	560	480	Other Current Assets	40	30
Provision for Tax	64	70			
Total	2910	2250	Total	2910	2250

8

- (b) Saharanpur Sugar Mill Ltd. has a boiler that uses the unit's own by-product, cane waste (Bagasse), as fuel which has a market price of ₹ 750 per ton. The steam generated is first used for the generation of power and the exhaust steam is used in the process of sugar manufacture. The exhaust steam (after generation of power) transferred to the sugar manufacturing process is 84% of the cost of production of steam. The mill buys restricted amount of power from the grid. The following details are extracted from the Financial Accounts and Cost Accounting Records of the Sugar Mill:

Sugar produced	28,70,000 quintals
Steam generated and consumed	17,58,000 ton
Fuel (Bagasse) consumed for production of steam	8,22,000 ton
Conversion Cost of generation of steam	₹ 10,97,00,000
Steam used for generation of power	7,44,000 ton
Power purchased from the Electricity Board @ ₹ 5.84/kWh	67,92,000 kWh
Power generated from the Steam Turbine	5,82,30,000 kWh
Conversion Cost of generation of power (excluding cost of steam)	₹ 5,06,61,500

Find out (i) Gross Cost of Steam per ton of Steam, (ii) Average Cost of Power per kWh and (iii) Average Cost of Power per ton of Sugar.

8

Answer:

6. (a)

	₹ in' 000	
(A) Capital Employed	31.03.2017	31.03.2016
Gross Block	2,400	1,800
Less Depreciation	840	600
(a) Net Fixed Assets	1,560	1,200
Current Assets: Stock	720	600
Sundry Debtors	410	300
Other Current Assets	40	30
Cash and Bank Balances	180	120
(b) Total Current Assets	1,350	1,050
Current Liabilities :		
Sundry Creditors	560	480
Provision for Tax	64	70
(c) Total Current Liabilities	624	550
(d) Working Capital = b-c	726	500
(e) Capital Employed = a+d	2,286	1,700
(B) Debt-Equity Ratio		
Debt--Secured	385	467
Debt--Unsecured	655	128
(i) Total Long-term Debt	1,040	595
Equity: Share Capital	600	600
General Reserves	414	326
Profit / Loss Account Balance	122	54
(ii) Total Equity	1,136	980
Debt-Equity Ratio (i) / (ii)	0.915 : 1	0.607 : 1
(C) Proprietary Ratio		
(i) Equity Fund	1,136	980
(ii) Total Assets (Fixed Assets + Working Capital)	2,286	1,700

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

Proprietary Ratio = (i) / (ii)	0.50 :1	0.58 : 1
(D) Current Ratio		
(i) Current Assets	1,350	1,050
(ii) Current Liabilities	624	550
Current Ratio: (i) / (ii)	2.16:1	1.91:1

(b)

(i) Gross Cost of Steam	₹
Cost of fuel consumed for production of Steam (8,22,000 × 750)	61,65,00,000
Conversion cost of generation of Steam	10,97,00,000
	<u>72,62,00,000</u>
Gross cost of Steam / ton (72,62,00,000 / 17,58,000)	413.08
(ii) Average Cost of Power per KWh	
Steam for Power (7,44,000 × 413.08)	30,73,31,520
Conversion Cost of generation of Power (including cost of Steam)	<u>5,06,61,500</u>
Grid Power Cost (67,92,000 × 5.84)	<u>3,96,65,280</u>
	39,76,58,300
Average cost of Power per KWh	6.11575
39,76,58,300 / (67,92,000 + 5,82,30,000)	₹ 6.12 (approx.)
(iii) Average cost of Power per ton of Sugar	₹ 138.5568
(39,76,58,300 / 28,70,000)	138.56 (approx.)

7. (a) A Cloth processing unit has two Rotary Printers-P1 and P2- running on two shifts, having normal capacity of 4600 hours. The unit can process two products X and Y which have the following cost structure:

Per 50 mts. of cloth	X	Y
Machine Hours required for P1	3	4
Machine Hours required for P2	3	4.5
Processing Fees (₹)	480	560
Direct Materials Cost (₹)	120	150

	Machine P1	Machine P2
Direct Labour/hr. (₹)	48	40
Variable overhead/hr. (₹)	30	22

In case of breakdown of any one machine, the management has to be selective in processing of products. Assuming that there is no other constraint of order book or costs, arrange the products in terms of profit. 8

- (b) Goodyear Automotives Ltd., located in a coastal state, had faced interruption in production during the year 2016-17 due to cyclone and flood. Out of total 303 available working days during the year, the interruptions were: (a) Flood: 4 days, (b) Cyclone: 3 days, and (c) Damage Restoration: 2 days (these exclude weekly off days falling in between). The unit declared lay-off during such period on payment of average 50% wages for direct workers. The damage to the plant and the cost of its repairs amounted to ₹ 87 million. Find out the abnormal expenses deductible from the product cost on the basis of the following expenses incurred in the FY 2016-17:

Amount in millions

Direct Wages & Salaries	1230	Indirect Wages & Salaries	740
Power	820	Depreciation	210
Other Fixed Expenses	490	Finance Charges	115

8

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

Answer:

7. (a) The contribution per 50 mts. of processing of products X and Y in machines P1 and P2 are analyzed below.

Products	X	X	Y	Y
Machines used	P1	P2	P1	P2
Processing Income (₹)	480	480	560	560
Direct Raw Materials (₹)	120	120	150	150
Direct Labour (₹)	144	120	192	180
Variable Overheads (₹)	90	66	120	99
Total Variable Cost (₹)	354	306	462	429
Contribution (₹)	126	174	98	131

Ranking for both machines P1 and P2 : X, Y

- (b) As per CAS 6, Abnormal Cost is defined as atypical or an unusual cost due to some abnormal situation in case of production or operation. Any abnormal cost is excluded from total cost of production. In the present case, the following expenses are excluded from the total expenses:

- 1) The Finance Charge is not charged to Cost of Production but is to be shown under the head 'Cost of Sales' (CAS 17).
- 2) Power is a direct cost and is excluded from the total expenses.
- 3) Direct wages and salaries is a variable cost but, in the given situation, the layoff payment was made and hence is treated as fixed cost.
- 4) Depreciation is treated as fixed cost by its very nature (number of days of working).

Accordingly, the abnormal expenses for the year comes to:

		₹ in million
Lay off payment (1230 x 9 / 303 x 0.5)		18.27
Restoration Cost of plant damages & repairs		87.00
Indirect Wages & Salaries	740	
Other Fixed Expenses	490	
Depreciation	210	
	1440	
The abnormal expenses will be = 1440 x (9/303)		42.77
Total : (Lay-off payment + Restoration Cost of plant Damage & repairs + Abnormal Expenses)		148.04

8. Answer any four.

4x4=16

- (a) How do you define 'Packing Material' as per the Generally Accepted Cost Accounting Principle? What is the treatment of such cost? 4

- (b) Suggest some checklists the Cost Auditor should draw for Profitability Analysis in a manufacturing organization. 4

- (c) What do you understand by 'Energy Audit'? Briefly state the functions of Energy Auditor. 4

- (d) ABC Stores is a departmental store, selling goods on retail basis. It makes a gross profit of 20% on net sales. The following figures for the year-end are available: Opening Stock ₹62,000, Purchases ₹4,46,000, Purchase Returns ₹12,500, Freight Inwards ₹15,000, Gross Sales ₹5,60,000, Sales Returns ₹14,000 and Carriage Outwards ₹8,000. Calculate the estimated cost of the Inventory on the closing date. 4

Suggested Answer_Syllabus 2016_Jun2017_Paper 19

- (e) During the Energy Audit of Reliable Engineering Ltd., the following figures relating to usage of power were placed before the Auditor:

	2016-17	2015-16	2014-15
Total Power consumed (kWh)	2642720	2744360	2393250
Rate per kWh (₹)	6.29	5.42	4.90
Total Production (in million kg.)	422.16	416.36	376.08

Compute the necessary productivity measures and (i) Price Variance and (ii) Volume Variance of power usage during these years. 4

Answer:

- (8) (a) The Cost Accounting Standard on Packing Material Cost (CAS 9) defines Packing Materials as materials used to hold, identify, describe, store, protect, display, transport, promote and make the product marketable.

Packing Materials for the purpose of the standard are classified into primary and secondary packing materials. Primary Packing Material is that packing material which is essential to hold and preserve the product for its use by the customer. Secondary Packing Material is that packing material that enables to store, transport, inform the customer, promote and otherwise make the product marketable. For example, in 'pharmaceutical industry', cartons used for holding strips of tablets and card board boxes used for holding cartons.

Packing material costs shall be directly traced to a cost object to the extent it is economically feasible. Where the packing material costs are not directly traceable to the cost object, these may be assigned on the basis of quantity consumed or similar measures like technical estimates. The packing material cost of reusable packing shall be assigned to the cost object taking into account the number of times or the period over which it is expected to be reused. Cost of primary packing materials shall form part of the cost of production. Cost of secondary packing materials shall form part of distribution overheads.

- (b) In the analysis of the profitability in a financial year, the Cost Auditor needs to analyze the effects of change in the selling price and change in the different elements of cost. In the case of service industry, the Cost Auditor needs be careful as the output units in such sector are not standard and needs bifurcation of each element of cost and revenue. The usual checklists an Auditor should draw up for the analysis are stated below.

- Sale and Production Records – Analysis of past year's data to identify variations
- Reconciliation of Sales with CENVAT Records--to see any discrepancy which has led to wrong accounting, if any
- Pricing and Discount Structure Policy – analyze the variations to see how far the changes have favoured the profitability and marketability of products
- Product Cost Statements – Cost data analysis will facilitate discovering variable and fixed cost elements and their impact on total profitability
- Operational Budget – A study of the budget estimates with that of the actuals will throw light on the deficiencies and will lead to taking corrective measures

- (c) Energy Audit consists of activities that seek to identify conservation opportunities preliminary to the development of an energy saving programmes. In other words, an Energy Audit is conducted to seek opportunities to reduce the amount of energy input into the system without negatively affecting the output(s). An Energy Audit also seeks to prioritize the energy uses according to the maximum to the least cost-effective opportunities for energy savings. Energy Audit means monitoring the energy efficiency of different equipment and processes in a plant and looking into way by which the total sum of energy consumed can be cut down without affecting production or its efficiency.

Energy Auditor seeks to focus on the possible sources for conserving energy.

