

Paper – 19 - Cost and Management Audit

Full Marks: 100 Time allowed: 3 hours Answer Question No. 1 which is compulsory and carries 20 marks and any five from Question No. 2 to 8. **Section-A** [20 marks] 1. Choose the correct option among four alternative answer. (1 mark for correct choice, 1 mark for justification.) A. Costing Taxonomy is best defined as a: (a) Dictionary (b) Made easy. (c) Tax Ready Reckoner (d) Referencer. B. The forex component of imported material is converted at the rate on _____ (a) date of payment (b) date of delivery (c) date of transaction (d) date of use. C. CAS 5 deals with (a) equalized cost of transportation (b) captive consumption (c) capacity determination (d) cost classification. D. Para 6, Part D of the Annexure to the Cost Audit Report provides information on: (a) Financial Position and Ratio Analysis(for the company as a whole) (b) Value Addition and Distribution of Earnings for Product Group (c) Product and profitability statement(for audited products/services) (d) Reconciliation of Indirect Taxes(for company as a whole) E. There are no fixed items of evidence to be checked by Management Auditor (a) The statement is true. (b) The statement is false. (c) The statement is partly true. (d) The statement is partly false. F. Penalty paid to PF authorities is ----- in Employee Cost. (a) included (b) excluded (c) will depend on individual case. (d) partly included.

G. Copy of Cost Audit Report neednot be submitted to

(a) Central Government

- (b) Board of Directors of the Company
- (c) Members at Annual General Meeting of the Company.
- (d) Income Tax Officer along with the Income tax Return.
- H. Number of Sectors/industry product/service under Regulated category are:
 - (a) Three
 - (b) Two
 - (c) Six
 - (d) Five
- I. PART B of the Annexure to Cost Audit Report provides information on:
 - (a) Service sector
 - (b) Manufacturing sector
 - (c) Agricultural Sector
 - (d) Foreign Trade.
- J. Royalty paid on sales ₹30,000; Royalty paid on units produced ₹20,000, Hire Charges of equipment used for production ₹2,000, Design charges ₹15,000, Software development charges related to production ₹22,000. The Direct Expenses amount is:
 - (a) ₹88000
 - (b) ₹89000
 - (c) ₹99000
 - (d) ₹98000

Answer:

- A: (a) Dictionary. Costing Taxonomy is a dictionary of all cost elements required in cost audit report.
- B: (c) date of transaction. This is as per CAS 6 and GACAP
- C: (a) equalized cost of transportation. The objective of the standard is to bring uniformity in the application of principles and methods used in the determination of averaged/ equalized transportation cost.
- D: (d) Reconciliation of Indirect Taxes (for company as a whole). Companies (Cost Records and Audit), Rules 2014 prescribes this format of information.
- E: (a) The statement is true. A Management Auditor has to rely more on his experience and acumen to identify areas of review.)
- F: (b) excluded. Penalty paid to PF authorities is not normal cost. Hence excluded as per CAS 7 from Employee Cost.
- G: (c) Members at Annual General Meeting of the Company. The shareholders and the general public have no access to the Cost audit Report unlike the Financial Audit Report. Cost Audit Report is treated as a confidential document as it contains vital information which if divulged would affect competitiveness of trade and business of the company whose information is so divulged.

- H: (c) Six. This is as per Table A of Section 3 of the Companies (Cost Records and Audit) Rules,
- I: (b) Manufacturing sector. Companies (Cost Records and Audit), Rules 2014 prescribes this format of information.

J: — (b) ₹89000.

Direct expenses=Royalty paid on sales+ Royalty on unites produced +Hire charges on equipment +Design Charges+ Software development charges = ₹(30000+20000+2000+15000+22000)=₹89000

Section-B

(Answer any 5 questions from this section)[80 marks]

- 2. (a) The Cost Audit report contains significant information which would help to assess and improve operational efficiency of a concern: Discuss the statement with reference to the matters to be reported by a Cost Auditor in his report.
- 2. (b) Explain whether the following amounts to professional misconduct by a Cost Accountant:
 - (i) Mr. X, a CMA was invited by the Chamber of Commerce to present a paper in a symposium on the issues facing Indian Jute Industry. During the course of his presentation he shared some of the vital information of his client's business under the impression that it will help the Nation to compete with other countries at international level.
 - (ii) A firm of Cost Accountants was appointed by a company to evaluate the costs of the various products manufactured by it for its information system. One of the partners of the firm was a Non-Executive Director of the company.

[4+4=8]

Answer:

2. (a)

- The Cost Auditor has to report whether the Cost Accounting System followed is adequate for determination of the fair cost of production.
- (II) He has to report on the financial performance of the company as well as of the product under cost audit, along with various ratios and offer comments on the ratios.
- (III) He has to indicate the percentage of production in relation to the installed capacity expressed in appropriate units of measurement. He has also to state reasons for the shortfall in production bringing out clearly the extent to which they are controllable both in short term as well as long term.
- (IV) He has to give observations as regards variations, if any, in the rate of major raw materials, power and fuel etc. in terms of rate per unit as compared to previous year, if any.
- (V) He has to give details of wages and salaries including direct labour cost per unit of output and as compared to the previous year.
- (VI) He has to indicate the amount of overheads along with reasons for any significant variations in expenditure incurred against the items of factory, administration, selling and distribution overheads as compared with previous two years.
- (VII) The cost auditor has also to mention any abnormal feature affecting the production indicating their effect on the unit cost of production.

Again the cost auditor may offer suggestions as regard the following matters for improvements in performance of the company under audit with reference to:-

- (a) Rectification of general imbalance in production facilities
- (b) Fuller utilization of installed capacity
- (c) Concentration on areas offering scope for cost reduction, increased productivity and key limiting factors causing production bottlenecks; and
- (d) Suggesting improved inventory policies

As far as possible data for the earlier years has to be furnished. The cost auditor could also interpret the data from the trend for the earlier years, and offer suggestions.

The opinions shall be bases on verified data, reference to which shall be made and shall be included after the company has been given an opportunity to comment on items.

- 2. (b) (i) Clause (1) of Part I of the Second Schedule to the Cost and Works Accountants Act. 1959 deals with the professional misconduct relating to the disclosure of information by a CMA in practice relating to the business of his clients to any person other than his client without the consent of his client or otherwise than as required by any law for the time being in force would amount to breach of confidence. The Code of Ethics further clarifies that such a 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 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 nation to compete with other countries at International level. Thus it is a professional misconduct covered by clause(1) of Part I of Second Schedule to the Cost and Works Accountants Act, 1959.
 - (ii) Clause 4 of Part I of the Second Schedule to Cost and Works Accountants Act, 1959 states that expressing an opinion on cost and pricing of any business or any enterprise in which the auditor, his firm or a partner in his firm has a substantial interest would constitute misconduct, unless he discloses the interest also in his report. As per facts of the case, the firm has been retained to evaluate the cost of products manufactured by it for its information system. So this amounts to professional misconduct.
- 3.(a) 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. [8]

3. (b) Following are date available from a company which has both domestic and export sales.

The compan	y is subj	ect to	cost audit.	Prepare	a statement o	of export	profitabil	ity.

Production	10,000 units	,
Sales Domestic	9,000 units at	₹22/unit
Sales Export	1,000 units at	₹17/ unit
Raw materials consumed		₹90,000
Imported component used only for exported quality		₹3,000
Direct Labour		₹10,000
Factory overhead		₹15,000
Administration overhead		₹5,000
Export Packing		₹3,000
Freight and Packing for Domestic Sales		₹4,500
Handling at Port		₹500
Opening WIP		₹10,000
Closing WIP		₹5,000

For export an imported component is to be used at a cost of ₹3 per unit. The indigenously produced component that is used for domestic sales and included in raw material consumption is ₹4 per unit. Duty drawback on the 1000 units export is ₹1,500.

Answer:

3.(a)

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

 $: 90.80 - (90.80 \times 0.0695) = 90.80 - 6.31 = 84.49$ Drawing: $84.49 - (84.49 \times 0.0125) = 84.49 - 1.056 = 83.43$ etc.

(2) Waste Multiplier:

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

3.(b) Cost of production common to domestic sales and exports

Total production	10,000 units
Raw materials consumed	₹90,000
Less: Component used only for domestic sales 9000 x ₹4	<u>₹36,000</u>
Net raw material consumption	₹54,000
Direct labour	₹10,000
Factory overhead	₹15,000
Administration overhead	₹5,000
Opening WIP	₹10,000
Closing WIP	₹ (5,000)
	₹89,000
Common cost per unit	₹8.9
Production for export sales	1,000 units
Common cost as above 1000 x ₹8.90	8,900
Cost of imported component used	
exclusively for exports 1000 x ₹3	₹3,000
Exporting packing	₹3,000
Handling at port	₹500
Cost of exports	₹15,400
Export sales realisation 1000 x ₹ 17	₹17,000
Export profit (Sales less cost)	₹1,600
Export benefit duty drawback	₹1,500
Adjusted export profitability	₹3,100

- 4. (a) Evaluation of the personnel function of an organization by management auditor is by no means an easy task. In your view what areas are to be covered and points to be kept in mind while assessing the personnel function of an organization?
- 4. (b) While performing an Information System Audit, the Management Auditor should make sure that various objectives are met. Briefly describe them. [8]

Answer:

- 4.(a) The personnel management is concerned with managing people at work for development of efficient and loyal employees for attainment of organization goals. So evaluation personnel function is not an easy task. The important areas to be covered by management auditor while evaluating personnel function are as follows:
 - i) Methods followed for manpower planning, recruitment, training, promotion and transfers.
 - ii) Action plan for reducing absenteeism.
 - iii) Procedure for analysis of labour turnover and steps taken for reduction of the same.
 - iv) Method adopted for developing wage and salary structure.
 - v) Incentives plan -both financial, i.e bonus, increment etc and non financial e.g job enrichment, promotion etc.

- vi) Welfare and safety measures adopted including social security measures and community development programmes.
- vii) Performance appraisal system of the organization.
- viii) Measures undertaken to boost employee morale.

The following points to be kept in mind while assessing the personnel function of an organization:

- i) It is difficult to exactly quantify the influence of human factors and its contribution to success or failure of the organization.
- ii) Development of a uniform yard stick for measurement of performance of a large group of workers is also not easy.
- iii) Workers get influenced by the overall industrial environment.
- iv) Motivating the employees towards achievement of organization goals is a very important as well as difficult task.
- v) The management auditor should assess whether the managers possess necessary leadership qualities and dynamic ideas to motivate their personnel.
- vi) The personnel function is a very important function because in the absence of a well organized personnel function, the company will not be able to utilize the other resources in optimum manner. Human resource is the most important resource in any organization.
- **4.(b)** While performing an Information System audit, Management Auditors should ascertain that the following objectives are met:
 - (i) Security provisions protect computer equipments, programs, communications and data from unauthorized access, modification, or destructions.
 - (ii) Program development and acquisition is performed in accordance with management's general and specific authorization.
 - (iii) Program modifications have the authorization and approval of management.
 - (iv) Processing of transactions, files, reports and other computer records is accurate and complete.
 - (v) Source data that is inaccurate or improperly authorized is identified and controlled according to prescribed managerial policies.
 - (vi) Computer data files are accurate, complete and confidential.
- 5. (a) How the Cost Auditor is under obligation to report fraud identified during course of audit?
- 5. (b) You have been appointed as an internal auditor for M/s KBC Ltd which is a large manufacturing concern. You are asked to verify whether there are adequate records for identification and value of Plant and Machinery, tools and dies and whether any of these items have become obsolescent and not in use. Draft a suitable audit programme for the above.
 [8]

Answer:

5. (a) Sub-rule (7) of Rule 6 of the Companies (Cost Records and Audit) Rules 2014 states that "the provisions of sub-section (12) of section 143 of the Act and the relevant rules made thereunder shall apply mutatis mutandis to a cost auditor during performance of his functions under section 148 of the Act and these rules". For the purpose of sub-section (12) of section 143, in case the auditor has sufficient reason to believe that an offence involving fraud, is being or has been committed against the company by officers or

employees of the company, he shall report the matter to the Central Government immediately but not later than sixty days of his knowledge and after following the procedure indicated herein below:

- i. Auditor shall forward his report to the Board or the Audit Committee, as the case may be, immediately after it comes to his knowledge of the fraud, seeking their reply or observations within forty-five days;
- ii. On receipt of such reply or observations the auditor shall forward his report and the reply or observations of the Board or the Audit Committee along with his comments (on such reply or observations of the Board or the Audit Committee) to the Central Government within fifteen days of receipt of such reply or observations;
- iii. In case the auditor fails to get any reply or observations from the Board or the Audit Committee within the stipulated period of forty-five days, he shall forward his report to the Central Government along with a note containing the details of his report that was earlier forwarded to the Board or the Audit Committee for which he failed to receive any reply or observations within the stipulated time.
 - Accordingly, as per sub-section (12) of section 143 of the Companies Act 2013, it is obligatory on the part of cost auditor to report offence of fraud which is being or has been committed in the company by its officers or employees, to the Central Government as per the prescribed procedure under the Rules.
- 5.(b) The Internal Audit Programme in connection with Plant and Machinery and Tools and Dies may be on the following lines:
 - Internal Control Aspects: The following may be incorporated in the audit programme to check the internal control aspects:
 - (A) Maintaining separate register for hired assets, leased asset and jointly owned
 - (B) Maintaining register of fixed asset and reconciling to physical inspection of fixed asset and to nominal ledger.
 - (C) All movements of assets are accurately recorded.
 - (D) Authorization be obtained for -
 - (i) a declaring a fixed asset scrapped.
 - (ii) selling a fixed asset.
 - (E) Check whether additions to fixed asset register are verified and checked by authorised person.
 - (F) Proper recording of all additions and disposal.
 - (G) Examining procedure for the purchase of new fixed assets, including written authority, work order, voucher and other relevant evidence.
 - (H) Regular review of adequate security arrangements.
 - (I) Periodic inspection of assets is done or not.
 - (J) Regular review of insurance cover requirements over fixed assets.
 - Assets Register: To review the registers and records of plant, machinery, etc. showing clearly the date of purchase of assets, cost price, location, depreciation charged, etc.
 - Cost Report and Journal Register: To review the cost relating to each plant and machinery and to verify items which have been capitalised.
 - Code Register: To see that each item of plant and machinery has been given a distinct code number to facilitate identification and verify the maintenance of Code Register.

- (v) Physical Verification: To see physical verification has been conducted at frequent intervals.
- (vi) Movement Register: To verify (a) whether a Movement Register for movable equipments and (b) log books in case of vehicles, etc. are being maintained properly.
- (vii) Assets Disposal Register: To review whether assets have been disposed off after proper technical and financial advice and sales/disposal/retirement, etc. of these assets are governed by authorisation, sales memos or other appropriate documents.
- (viii) Spare Parts Register: To examine the maintenance of a separate register of tools, spare parts for each plant and machinery.
- (ix) Review of Maintenance: To scrutinise the programme for an actual periodical servicing and overhauling of machines and to examine the extent of utilisation of maintenance department services.
- (x) Review of Obsolescence: To scrutinise whether expert's opinion have been obtained from time to time to ensure purchase of technically most useful efficient and advanced machinery after a thorough study.
- (xi) Review of R&D: To review R&D activity and ascertain the extent of its relevance to the operations of the organisation, maintenance of machinery efficiency and prevention of early obsolescence.

6. (a) Manufacture's specification capacity for a machine per hour =500 units
No. of shifts (each shift of 8 hours each) =3shifts

Paid holidays in a year (365 days):

Sundays = 52 days

Other holidays = 13

Annual maintenance is done during the 13 other holidays.

Preventive weekly maintenance is carried on during Sundays.

Normal idle capacity due to lunch time, shift change etc = 1hour per shift Production during last five years = 30.1, 26.9, 29.7, 24.4 and 30.2 lac units.

Actual production during the year = 30.1 units.

Calculate Installed capacity, Normal capacity, Normal Idle capacity and Abnormal idle capacity as per CAS 2 from the data given. [2+2+1+1=8]

6. (b)ASHIRBAD CEMENT LTD. has a captive power generation plant for its cement factory. Thefollowing information is available with regard to the power generation for the year endedMarch 31, 2017:

Coal consumption	2400 tonnes @ ₹600 per tonne
Oil	3000 liters @ ₹50.50 per litre
Water	24000 gallons at ₹60 per gallon
Stores and other consumables	₹ 55,000

Salaries of power generating plant:

2 supervisors each at ₹10,600 p.m., 5 skilled workers each at ₹6,100 p.m., 3 helpers each at ₹4,200 p.m.

Salaries to boiler house attendant, 8 workers, each at ₹4,200 p.m.

Cost of power generating plant— ₹15,00,000 having life of plant 15 years with ₹ 60,000 residual value.

Cost of Boiler plant— ₹₹6,00,000 having life of plant 10 years with no residual value.

Miscellaneous income received by sale of ash— ₹ 50,000.

Repair and maintenance— Power generating plant ₹ 1,50,000, Boiler house ₹ 1,26,000.

Share of Administrative Overhead— ₹ 1,35,000. Power generated during the year: 3024250 KWH.

Note: No power generated is used by the power generated plant itself.

You are required to prepare the Cost Sheet to calculate cost per kWh of electricity generated as per the Companies (Cost Records and Audit) Rules 2014 for the year ended March 31, 2017.

Answer:

6.(a) Installed capacity for the machine $=365 \times 8 \times 3 \times 500$

= 43.8 lac units

Out of the past 5 years , normal capacity is average of 3 normal years

Normal capacity = (30.1+29.7+30.2)/3

= 30.0 lac units

Actual capacity utilization =30.1 lac units

= 68.7% of Installed capacity

Normal Idle capacity = (43.8-30.1)

=13.7 lac units =31.3% of Installed capacity

Abnormal Idle capacity =31.5-30.1

=1.4 lac units

6. (b) ASHIRBAD CEMENT LTD STATEMENT SHOWING COST OF POWER GENERATED BY POWER GENERATED PLANT FOR YEAR ENDED MARCH 31, 2017

Power generated			3024250 kwh
Particulars		Total Amount (₹)	Cost Per Kwh (₹)
Coal consumption (2400 × 600)	1440000	()	
Less: Sale of Ash	50000	1390000	0.46
Oil 3000 litres at ₹ 50.50 per ltr.		151500	0.05
Water 24000 gallans at ₹60/- per gallan		1440000	0.48
Stores and other consumables		55000	0.02
Salaries of generating plant			
Supervisor (2 ×10600 ×12)	254400		
Skilled Worker (5 × 6100 ×12)	366000		
Helpers (3 x 4200 ×12)	151200	771600	0.26
Salaries To Boiler House Attendant (8× 4200 ×12)		403200	0.13
Repairs and maintenance Generating plant Boiler house	150000 126000	276000	0.09
Depreciation			
Generating Plant (1500000 - 60000)/15 Yrs.	96000		
Boiler House (600000/10 Yrs.)	60000	156000	0.05
Share of administrative overhead		135000	0.04
Total cost of power generated		4778300	1.58

So, Cost per KWH of Electricity generated = ₹1.58

7.(a) 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]
- 7.(b)There was a strike from 17.08.2016 to 28.10.2016 in a company of which you were the cost auditor for the year ending 31.03.2017. Although the company began working from 29.10.2016, production could effectively begin only from 30.11.2016. The expenses incurred during the year ended 31.03,2016 were:

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Particulars	₹ in lacs
Salaries & Wages (direct)	3000
Salaries & Wages (indirect)	2000
Power (variable-90%)	1200
Depreciation	1800
Other fixed expenses	2400
Repair and Maintenance(variable ₹1100 lacs)	1400
Total	11800

The following related to the period 17.08.216 to 29.11.2016

Particulars	₹ in lacs
Salaries & Wages (indirect)	700
Depreciation(non-productive)	600
Other fixed expenses	900
Repair and Maintenance(Indirect)	100
Total	2300

Calculate the amount which in your opinion should be treated as abnormal for exclusion from the product cost. [6]

Answer:

7.(a) BIDHISHREE 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
Wor	king 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
Prac	ctical hours available		1840
		Machine	Assembly
		shop	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.

7.(b) Calculation of Fixed expenses incurred during the period 17.8.2016 to 29.11.2016

Particulars	₹ in lacs	₹in lacs
Total expenses		11800
Less: Variable Expenses		
Power(1200-120)	1080	
Repairs & Maintenance	1100	2180
Total fixed expenses during 15-16		9620

Since strike period is 73 days and non – strike period is 292 days (292+73=365)
Fixed expenses calculated during strike period i.e 17/8/2016 to 28/10/2016 = 73 days
=₹9620lacs /365*73=₹1924 lacs

Fixed expenses during 29/10/2016 to 29/11/2016 = 32 days

- = (₹2300-₹1924) lacs
- = ₹376 lacs

Thus ₹1924 lacs is to be treated as abnormal cost and should be excluded from product cost.

8. Answer any four questions:

[4×4=16]

- (a) How do you define the following under Generally Accepted Cost Accounting Principles?
 - (i) Value of self manufactured materials.
 - (ii) Cost of cane supplied from own farm to sugar mill.

[2+2=4]

- (b) As a Cost Auditor how would you deal with the following?
 - (i) ABC Ltd . manufacturers of cables and conductors , has charged only a portion of administrative overheads to cost of production and balance to cost of sales of its products.
 - (ii) KBC Ltd. does not have a system of internal audit but states that it has introduced adequate internal controls. [2+2=4]
- (c) State four objectives of Operational Audit.

[4]

(d) Gross pay ₹ 10,30,000 (including cost of idle time hours paid to employee ₹ 25,000); Accommodation provided to employee free of cost [this accommodation is owned by employer, depreciation of accommodation ₹ 1,00,000, maintenance charges of the accommodation ₹ 90,000, municipal tax paid for this accommodation ₹ 3,000], Employer's Contribution to P.F. ₹ 1,00,000 (including a penalty of ₹ 2,000 for violation of PF rules), Employee's Contribution to P.F. ₹ 75,000. Compute the Employee cost as per CAS 7. [4]

(e) A manufacturing unit produces two products X and Y. The following information is furnished:

Particulars	Product X	Product Y
Units produced (Qty)	20000	15000
Units Sold (Qty)	15000	12000
Machine Hours utilised	10000	5000
Design charges(₹)	15000	18000
Software development charges(₹)	24000	36000

Royalty paid on sales $\stackrel{?}{\sim}$ 54,000 [@ $\stackrel{?}{\sim}$ 2 per unit sold, for both the products]; Royalty paid on units produced $\stackrel{?}{\sim}$ 35,000 [@ $\stackrel{?}{\sim}$ 1 per unit purchased, for both the products], Hire charges of equipment used in manufacturing process of Product X only $\stackrel{?}{\sim}$ 5,000, Compute the Direct Expenses as per CAS 10. [4]

Answer:

- **8.(a)(i)** Self manufactured materials (and self manufactured components and sub assemblies) are valued at cost including Direct Material Cost, Direct Employee Cost, Direct Expenses, Factory Overheads and share of Administrative Overheads relating to production. Share of other Administrative Overheads, Finance Cost and Marketing Overheads are excluded.
 - (ii) The cane supplied from own farm to a Sugar Mill is charged at State Advisory Price/Control Rate and profit/loss on farm taken to Profit & Loss Account directly. This is permitted by the Cost Accounting Record Rules for Sugar Industry. Such a treatment is advised where the correct determination of cost of the production of items procured from own farm is fraught with difficulty.
- **8.(b)(i)** In case administrative overheads are not analysed separately, these may be apportioned to the cost of production and the cost of sales on some appropriate basis. In the instant case the company is correctly treating the administrative overheads. However, the Cost Auditor should check the following in this connection:
 - Apportionment of administrative overheads to cost of production and cost of sales is on appropriate basis; and
 - This practice is consistently followed from year to year.
 - (ii) Item (v) of the First Paragraph of the main cost audit report in Form II requires the cost auditor to comment on adequacy of internal audit of cost records. It requires the cost auditor to ascertain and state whether:
 - System of internal audit of cost records exists in the company;
 - Whether such system is adequate;

• Whether such system is commensurate to the size of the company and nature of its business.

Therefore cost auditor should specifically mention that there is no system of internal audit in the company.

8.(c) Generally, operational audit objectives include:

- (i) Appraisal of controls: The most significant gain an organisation can derive from operational auditing is probably in the area of appraisal of controls.
- (ii) Evaluation of performance: In performance appraisal, the operational auditor is basically concerned not so much with how well technically the operations are going on, but with accumulating information and evidence to measure the effectiveness, efficiency and economy with which the operations are being carried on.
- (iii) Appraisal of objectives and plans: . Operational auditor may look into the aspects like whether objectives are clearly spelt out and properly communicated to the personnel responsible for implementation and whether the personnel have understood the objectives in the sense meant by the management. Also, he can take note of any apparent conflict in the objectives for its effect on operations.
- (iv) Appraisal of organisational structure: Organisational structure provides the line of relationships and delegation of authority and tasks. Therefore, this is also another important area for appraisal by the operational auditor.

8. (d)

Computation of Employee Cost

Particulars	₹
Gross Pay (net of cost of idle time) =[10,30,000 (-) 25,000]	10,05,000
Add: Cost of accommodation provided by employer = Depreciation (+) Municipal Tax paid (+) maintenance charges = 1,00,000 + 90,000 + 3,000 = 1,93,000	1,93,000
Add: Employer's Contribution to PF excluding penalty paid to PF authorities [1,00,000 (-) 2,000]	98,000
Employee Cost	12,96,000

8. (e) Computation of Direct Expenses

Particulars	Product X ₹	Product Y ₹
Royalty paid on Sales	30000	24000
Add: Royalty paid on units produced	20000	15000
Add: Hire charges of equipment used in manufacturing process of Product X only	5000	-
Add: Design Charges	15000	18000
Add: Software development charges related to production	24000	36000

Direct Expenses	94000	93000

Note:

- (i) Royalty on production and royalty on sales are allocated on the basis of units produced and units. sold respectively. These are directly identifiable and traceable to the number of units produced and units sold. Hence, this is not an apportionment.
- (ii) No adjustments are made related to units held, i.e. closing stock.