Paper – 8: Cost & Management Accounting

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

Question No 1 is Compulsory. Answers any five Questions from the rest.
Working Notes should form part of the answer.

Question.1

(a) Match the statement in Column I with the most appropriate statement in Column II : [1×5 =5]

Column I	Column II
Debenture interest	Inventory management
JIT system	Cost Control
Standard costing	Does not involve any cash out flow
Notional cost	Semi-variable cost
Telephone charges	Item of reconciliation

(b) Fill in the blanks: [1×5 =5]

(i) A Budget is a statement that is always prepared …… to a defined period of time.

(ii) MRP is a production planning system that starts with……..

(iii) Any Transfer Pricing system has to ensure that the allocation of resources is done in such a manner so as to promote……of the organization.

(iv) Under ABC System, the aggregate of closely related tasks is called ……

(v) The cost of abnormal waste should be excluded from the total cost and charged to ……

(c) State whether the following statements are TRUE or FALSE: [1×5 =5]

(i) Cost Accounting is a branch of Financial Accounting.

(ii) The flux rate method of labour turnover considers employees replaced.

(iii) Production cost efficiency alone is no guarantee of profit.

(iv) TQM stresses on zero defects and doing it right first time.

(v) Transfer pricing has significance for the purpose of measurement of divisional performance.

(d) In the following cases, You are required to indicate the correct answer and give workings: [2x5 =10]

(i) The annual carrying cost of material 'A' is ₹7.2 per unit and its total carrying cost is ₹18,000 per annum. Calculate the Economic Order Quantity for material 'A'. If there is no safety stock of material A.

A. 4,000 unit
B. 5,000 units
C. 5,500 units
D. 6,000 units

(ii) In a factory repairs and maintenance expenses were ₹1,50,000 at 60% capacity level out of these 40% was fixed. Calculate the repairs and maintenance expenses for the capacity level of 80%.

A. ₹1,80,000
B. ₹1,50,000
C. ₹90,000
D. ₹60,000

(iii) SHAAN LTD. earned a profit of ₹3,00,000 during the year 2014-15. If the marginal cost and selling price of a product are ₹80 and ₹100 per unit respectively, find out the amount of 'Margin of Safety'.

A. ₹3,00,000
B. ₹6,00,000
C. ₹15,00,000
D. ₹18,00,000

(iv) Using Taylor's differential piece rate system, calculate the earnings of 'X' from the following information:

Standard time per piece	**= 12 minutes**
Normal rate per hour (in a 8 hours day)	**= ₹30**
'X' produced	**= 37 units**

A. ₹184.26
B. ₹199.20
C. ₹92.50
D. ₹90.50

(v) A factory transferred out 8,800 completed units during November' 2014. Opening stock was 400 units 75% completed; closing stock was 800 units 50% completed. Assuming FIFO method, estimate the equivalent production in November 2014.

A. 8,700 units
B. 8,800 units
C. 8,900 units
D. 9,000 units

Answer:

(a)

Column I	Column II
Debenture interest	Item of reconciliation
JIT system	Inventory management
Standard costing	Cost control
Notional cost	Does not involve any cash out flow
Telephone charges	Semi-variable cost

(b)

(i) Prior
(ii) Master production schedule
(iii) Goal congruence
(iv) Activity
(v) Costing profit and loss account

(c)

(i) False.
(ii) False
(iii) True
(iv) True
(v) True.

(d)

(i) (B.) 5,000 units

$$\text{Total carrying Cost} = \frac{\text{Carrying Cost per unit} \times \text{EOQ}}{2}$$

$$\text{or}, 18{,}000 = \frac{7.2 \times \text{EOQ}}{2}$$

$$\text{Or}, = \frac{18{,}000 \times 2}{7.2}$$

= 5,000 units

(ii) (A.) ₹1,80,000

Machine shop expenses at 60% capacity level:

Fixed - ₹150,000 x 40%	=₹60,000
Variable- ₹150,000 -60,000	=₹90,000
	₹150,000

The expenses for level of 80% of capacity:
= (90,000x80/60) + 60,000 = ₹1,80,000

(iii) (C.) ₹15,00,000

Margin of Safety = Profit / (P/V ratio)
But P/V v ratio= Contribution/Sales = 20/100 = 20%

Hence, Margin of Safety= ₹3,00,000/ 0.20
= ₹15,00,000

(iv) (A.) ₹184.26

Standard output per day = $\frac{8 \times 60}{12} = 40$ units

Actual output = 37 units

Efficiency % = (37/ 40) x 100 = 92.5

Under this method lower rate is 83% of the normal rate and is applicable if efficiency of worker is below 100%

Earning rate per unit = 83% of 30/ 5 = 4.98 per unit

Earning = 37 x 4.98 = ₹184.26

Working:

In one hour, production will be = 60 minutes/ 12 minutes = 5 units

(v) (C.) 8,900 units

Equivalent Production= 8,800 - (400x0.75) + (800 x0.50) units

= 8800 –300 + 400 = 8,900 units

Question.2

(a) Construction Company undertook a contract at an estimated price ₹108 lacks, which includes a budgeted profit of ₹18 lacks. The relevant data for the year ended 31.3.2015 are as under:

	(₹ 000's)
Materials issued to site	**5,000**
Direct wages paid	**3,810**
Plant hired	**600**
Site office costs	**370**
Materials returned from site	**100**
Direct expenses	**500**
Work certified	**10,000**
Progress payment received	**7,200**

A special plant was purchased specifically for this contract at ₹10,00,000 and after use on this contract till the end of 31.03.2015, it was valued at ₹7,00,000. The cost of materials at site at the end of the year was estimated at ₹18,00,000. Direct wages accrued as on 31.03.2015 was ₹1,00,0000.

Prepare the Contract Account for the year ended 31st March, 2015 and compute the profit to be taken to the Profit & Loss account. [9]

Answer:

In the books of ---------

Contract Account for the year ended 31.3.2015

Dr. **Cr.**

Particulars	Amount (₹ in '000)	Particulars	Amount (₹ in '000)
To Material A/c	5,000	By Material A/c	1,800
To Wages A/c 3,810 Add: Outstanding 100	3,910	By Material A/c (returns)	100
To Direct Expenses	500	By Cost of contract c/d (balancing figure)	8,780
To Site Office Costs	370		
To Depreciation of special plant (₹10,00,000 - ₹7,00,000)	300		
To Hire charges of plant	600		
	10,680		10,680
To Cost of contract b/d	8,780	By Work-in-progress A/c Work Certified	10,000
To Notional Profit (Balancing figure)	1,220		
	10,000		10,000
To Costing Profit and Loss A/c (refer to note # 1)	1,200	By Notional Profit b/d	1,220
To Work-in-progress A/c (balancing figure)	20		
	1,220		1,220

Working Note 1: Amount to be transferred to the Costing Profit and Loss Account

$$= \frac{\text{Work Certified}}{\text{Contract Price}} \times 100$$

$$= \frac{₹1,00,00,000}{₹1,08,00,000} \times 100 = 92.59\%$$

$$= \text{Estimated Profit} \times \frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= ₹18,00,000 \times \frac{₹1,00,00,000}{₹1,08,00,000} \times \frac{₹72,00,000}{₹1,00,00,000}$$

$$= ₹12,00,000$$

(b) Discuss the treatment of :—

- **"Interest on Borrowing for Working Capital"**
- **"Cost of Containers Relating to Materials Purchased"** **[3+3=6]**

Answer:

Interest on Borrowing for Working Capital —

Inclusion of interest as an item of overhead in the cost is controversial and will depend upon circumstances. The general opinion is that interest on capital whether for working capital fund or otherwise, should not burden the product costs. If extra working capital funds are

required for some specific gainful purpose, viz., to purchase bulk material in view of emergency, the interest may be included as an element of the material cost.

Cost of Containers Relating to Materials Purchased —

Usually the cost of the containers containing the materials purchased is included in the cost of materials and therefore is automatically forms a part of material cost. The containers may be returnable or non returnable. The cost of the non returnable contains should be charged as a part of the materials cost and ultimately would go into the Prime Cost or Factory Overhead depending upon the usage of the materials as direct or indirect. In the case of returnable containers the cost of them should not be included either in cost of materials or in any other head, because when they are returned to the supplier, full credit would be received. If, however, container becomes damaged, it should be charged to the cost of the materials.

Question.3

(a) The Managing Director of All Found Limited is very much perturbed to see that labour turnover is increasing every year. Before taking an appropriate action, he desires to know the profit foregone on account of labour turnover. You are required to calculate the profit foregone on account of labour turnover from the following:

All Found Ltd.

Income Statement for the year ended 31-12-2014

Particulars	₹	₹
Sales		**2,00,000**
Variable Cost:		
Material	**50,000**	
Direct Labour	**40,000**	
Variable Overhead	**40,000**	**1,30,000**
Contribution		**70,000**
Less: Fixed Overhead		**20,000**
Profit before tax		**50,000**

The direct labour hours worked in the concern during the period were 20,300 of which 500 hours pertained to the new workers on training. Only 40% of the trainees' time was productive. As replacement for the worker left was delayed for some time, 600 productive hours were lost.

The direct costs incurred by the Company as a consequence of labour separation and replacement were as follows:

Separation costs – ₹ 2,000; Selection costs – ₹ 3,000 and Training costs – ₹ 5,000. [8]

Answer:

Direct labour hours worked	20,300
Less: unproductive time of new workers (500 hrs. × 60%)	300
Productive hours	20,000

Lost labour hours 600 (Replacement) + 300 (Training) = 900
Unit sales per Productive Labour Hours ₹ 2,00,000 ÷ 20,000 = ₹ 10

(i)	Loss of potential sales 900 hrs. × ₹ 10	₹ 9,000
	Direct labour cost per hour worked = ₹ 40,000 ÷ 20,300	1.97
(ii)	Increase in direct labour cost of lost hours due to replacement = 600 × 1.97 (300 hours already included while calculating the hourly rate)	1,182
(iii)	Increase in material and variable overhead due to increase in potential sales = (90,000 ÷ 2,00,000) × 9,000	4,050
	Total increase in cost (ii + iii)	5,232
	Contribution foregone (i – iii)	3,768
	Add: Separation, selection and training costs	10,000
	Profit foregone due to labour turnover	13,768

(b) The following are the maintenance costs incurred in a machine shop for six months with corresponding machine hours:

Months	Machine Hours	Maintenance Costs (₹)
January	**2,000**	**300**
February	**2,200**	**320**
March	**1,700**	**270**
April	**2,400**	**340**
May	**1,800**	**280**
June	**1,900**	**290**
Total	**12,000**	**1,800**

Analyse the maintenance cost, which is semi-variable, into fixed and variable element.

[7]

Answer:

There are a number of methods of segregating semi-variable cost into fixed and variable element. First of all variable element can be found out by applying only (i) Range or High and Low method, and (ii) Average method.

For finding out variable element

(I) Range Method:

	Machine Hours	Maintenance Cost (₹)
High – April	2,400	340
Low – March	1,700	270
	700	70

Variable cost per hour 70 ÷ 700 = ₹ ₹ 0.10
Variable cost for April (2,400 hours × ₹ 0.10) = ₹ 240
Fixed cost = Total cost less Variable cost = ₹ 340 – 240 = ₹ 100

(II) Average Method:

	Machine Hours	Maintenance Cost (₹)

Average for first two months	2,100	310
Average for last two months	1,850	285
	250	25

Variable elements = ₹ 25 ÷ 250 or ₹ 0.10 [This is the same as in (i) above.]

Analysis of maintenance Cost into fixed and variable element

Month	Machine Hours	Maintenance Cost	Variable cost @ ₹ 0.10 per hour	Fixed Cost
(1)	(2)	(3) (₹)	(4) (₹)	(5)[Col 3 – Col 4](₹)
January	2,000	300	200	100
February	2,200	320	220	100
March	1,700	270	170	100
April	2,400	340	240	100
May	1,800	280	180	100
June	1,900	290	190	100

Question.4

(a) "If the products are truly joint products, the cost of process can be applied to these products:

I. On the basis of the weight or other physical quantity of each product.

II. In respect of the marginal cost of the process on the basis of physical quantities and in respect of the fixed costs of the process on the basis of the contribution made by the various products.

III. On the basis of the selling values of the different products."

Using the following figures in respect of the joint production of A and B for a month, show the apportionment of joint costs and profits made, on the above three bases.

Total Cost

Direct Materials	**₹26,000**
Direct Labour	**10,000**
Variable Overhead	**8,000**
Fixed Overhead	**22,000**

Sales A – 100 tonnes @ ₹600 per tone

B – 120 tonnes @ ₹200 per tone **[4+4+3]**

Answer:

Sales:

A 100 × ₹600		₹60,000
B 120 × ₹200		24,000
Total sales		84,000
Less: Marginal cost:		

Direct Materials	₹26,000	
Direct Labour	10,000	
Variable Overhead	8,000	44,000
Contribution		40,000
Less: Fixed cost		22,000
Profit		18,000

Apportionment of Joint Costs

I. On the basis of weight:

Marginal cost	₹44,000
Fixed costs	22,000
Joint costs to be apportioned	66,000

Product	Weight (Tonne)	Apportioned Costs	Sales	Profit/Loss)
A	100	₹30,000	60,000	30,000
B	120	36,000	24,000	(12,000)
	220	66,000	84,000	18,000

II. Marginal cost on the basis of weight and fixed costs on the basis of contribution :

Product	Production (tone)	Contribution (₹)	Marginal Cost (₹)	Fixed Cost (₹)	Total Cost (₹)	Sales (₹)	Profit (₹)
A	100	40,000*	20,000	22,000	42,000	60,000	18,000
B	120	-	24,000	-	24,000	24,000	-
	220	40,000	44,000	22,000	66,000	84,000	18,000

III. On the basis of sales

Product	Sales	Product Cost	Profit
A	₹60,000	₹47,143	₹12,857
B	24,000	18,857	5,143
	84,000	66,000	18,000

(b) State the principle reasons which give rise to variances between actual and standard in standard costing. [4]

Answer:

The variances between actual and standards arise mainly due to the following reasons:

- Inefficient operations due to inefficient operations, in adequate machine usage/ faulty machinery
- Departure from laid down procedure
- Human error
- Inappropriate setting of standards
- Frequent changes in market prices of various inputs in an instable condition
- Errors in recording actual results.

Question.5

(a) The XYZ Company has the following budget for the year ended 2014-15:

Sales (1,00,000 units @ ₹20)	**₹20,00,000**
Variable cost	**10,00,000**
Contribution	**10,00,000**
Fixed Cost	**4,00,000**
Net Profit	**6,00,000**

From the above set of information find out:

(I) The adjusted profits for 2014-15 if the following two sets of changes are introduced and also suggest which plan should be implemented.

Plan A	%	Plan B	%
Increase in price	**20**	**Decrease in price**	**20**
Decrease in volume	**25**	**Increase in volume**	**25**
Increase in variable cost	**10**	**Decrease in variable cost**	**10**
Increase in fixed cost	**5**	**Decrease in fixed cost**	**5**

(II) The P/V ratio and break-even point under the two plans referred above. [5+5]

Answer:

XYZ Co.
Budget 2014-15

(Units 1,00,000)

	Per Unit	Total
Sales	₹20	₹20,00,000
Variable cost	10	10,00,000
Contribution	10	10,00,000
Fixed Cost	4	4,00,000
Net Profit	6	6,00,000

(I)

	Plan 'A'	Plan 'B'
Units: [1,00,000 – (1,00,000 x 25%)]	75,000	
[1,00,000 + (1,00,000 x 25%)]		1,25,000
Selling price per unit [₹20 x 1.20]	24	
[₹20 x 0.80]		16
Variable cost per unit [₹10 x 1.10]	11	
[₹10 x 0.90]		9
Contribution per unit	13	7
Total Contribution	9,75,000	8,75,000
Fixed Cost [4,00,000 x 1.05]	4,20,000	
[4,00,000 x 0.95]		3,80,000
Profit	5,55,000	4,95,000

It can be clearly seen from the above working that estimated profit is highest in the original budget. Therefore, neither Plan A nor Plan B should be implemented and followed.

(II)

	Budget	Plan A	Plan B
Contribution (₹)	10,00,000	9,75,000	8,75,000
Sales	20,00,000	18,00,000	20,00,000
Fixed Cost	4,00,000	4,20,000	3,80,000
P/V Ratio	50%	54.1667%	43.75%
BEP (Fixed Cost/ P/V Ratio)	₹8,00,000	7,75,385	8,68,571
BEP (units) (By dividing of sales by selling price per unit)	40,000	32,308	54,286

(b) A machinery was purchased from a manufacturer who claimed that his machine could produce 142.35 tonnes in a year consisting of 365 days. Holidays, breakdown, etc, were normally allowed in the factory for 65 days. Sales were expected to be 97.5 tonnes during the year and the plant actually produced 98.28 tonnes during the year.

You are required to state the following figures: Rated Capacity; Practical Capacity Normal Capacity; Actual Capacity. [1+2+1+1=5]

Answer:

Rated Capacity (Refers to the capacity of a machine or a plant as indicated by its manufacturer) = 142.35 tonnes.

Practical Capacity (Defined as actually utilized capacity of a plant)

$$\text{i.e.}\frac{142.35}{365}\times(365-65)\text{tonnes}=117\text{tonnes}$$

Normal Capacity (It is the capacity of a plant utilized based on sales expectancy) = 97.5 tonnes.

Actual Capacity (Refers to the capacity actually achieved) = 98.25 tonnes.

Question.6

(a) From the following, prepare variance analysis of a particular department for a month:

Variables overhead items

Variable overhead items	Actual (₹)
Materials handling	**8,325**
Idle time	**850**
Rework	**825**
Overtime premium	**250**
Supplies	**4,000**
	14,250

Fixed overhead items	Actual (₹)
Supervision	**1,700**
Depreciation Plant	**2,000**
Depreciation Equipment	**5,000**
Rates	**1,150**
Insurance	**350**
	10,200

Normal capacity 10,000 standard hours, budgeted rate ₹1.70 standard hour for variable overhead and ₹ 1.00 per standard hour for fixed overhead. Actual level: 8,000 standard hours.

[4+6]

Answer:

For Variable Overhead Variances

VO_1 -Actual variable overhead	= ₹14,250
VO_2 - Actual hours worked at std. V.O rate 8,000 hrs × ₹ 1.70	= 13,600
V. O. Expenditure Variance VO_1- $V0_2$	= 650 (A)

For Fixed Overhead Variance

FO_1- Actual F.O incurred	= ₹10,200
FO_2- Budgeted F.O.(10.000 HRS × ₹ 1)	= 10,000
FO_3- Not applicable	
FO_4 -Fixed overhead for actual hours worked at std. rate (8,000 hrs × ₹1)	= 8,000
FO_5 - Not applicable in this situation	
F.O. Expenditure variance FO_1- FO_2- ₹ 10,200- 10,000	= 200 (A)
F.O. Capacity Variance FO_2 - $F0_4$ = 10,000- 8,000	= 2,000 (A)
F.O. Variance = F.O. Expenditure Variance + F.O. Capacity Variance	= 2,200 (A)

(b) Explain Blanket (Single) Overhead Rate. [5]

Answer:

Blanket (Single) Overhead Rate:

A single overhead rate for the entire factory may be computed for the entire factory. So this is known as factory wide or Blanket Overhead Rate Method.

Blanket Rate = Overhead Cost for the factory / Total Quantum of the base.

Blanket Rate of overheads may be applied suitable in a small size concerns. Blanket Rates are easy to compute. The use of Blanket Rate of overheads gives erroneous and misleading results, where several products passing through number of different departments. With Blanket Rate of overhead, satisfactory level of managerial control is not possible.

Question.7

(a) Two fitters, a labourer and a boy undertake a job on piece rate basis for ₹1,290. The time spent by each of them is 220 ordinary working hours. The rates of pay on time-rate basis are ₹ 1.50 per hour for each of the two fitters, ₹1 per hour for the labourer and ₹ 0.50 per hour for the boy. Calculate:

(I) The amount of piece-work premium and the share of each worker, when the piece-work premium is divided proportionately to the wages paid.

(II) The selling price of the above job on the basis of the following additional data:

Cost of Direct Material ₹ 2010, Works overhear at 20% of prime cost, Selling Overhead at 15% of Works Cost and Profit at 25% on Cost of sales. [5+5]

Answer:

(I) Calculation of Wages

2 fitters at 1.50 per hour for 220 hours each	₹660
1 labourer at ₹1.00 per hour for 220 hours	₹220
1 boy at ₹0.50 per our for 220 hours	₹110
Total	₹990

Piece work premium

Total wages agreed on piece rate	₹1,290
Less: Wages calculated on time basis	990
	300

The amount of premium will be paid to workers in proportion to the wages paid, i.e., Fitter: Labourer: Boy = 660 : 220 : 110 as under

2 fitters	₹200
1 labourer	66.67
1 boy	33.33
Total	300.00

(II) Calculation of Selling Price

Cost of direct materials	₹2,010
Direct Wages as given in (I)	1,290
Prime Cost	3,300
Works Overhead at 20% of Prime cost	660
Works Cost	3,960
Selling Expense 15% of Works Cost	594
Cost of Sales	4,554
Add: Profit 25% on Cost of Sales	1,138.5
Selling Price	5,692.5

(b) In a manufacturing unit, overhead was recovered at a predetermined rate of ₹ 25 per man-day. The total factory overhead incurred and the man-days actually worked were ₹3,63,12,500 and 13,12,500 respectively. Out of the 40,000 units produced during a period 30,000 units were sold. There were also 30,000 uncompleted units which may be reckoned at 66.67% complete.

On analyzing the reasons, it was found that 40% of the unabsorbed overheads were due to defective planning and the rest were attributable to increase overhead costs.

How would unabsorbed overhead be treated in Cost Account? [5]

Answer:

	₹
Overheads incurred	3,63,12,500
Overheads absorbed (13,12,500 x 25)	3,28,12,500
Under absorption	35,00,000

The under absorption of ₹35,00,000 being considerable whether due to defective planning or due to increase in prices, would be disposed of by applying supplementary OH rate in the following manner:

$$\text{Supplementary OH rate} = \frac{₹35,00,000}{30,000+10,000+(30,000\times\frac{2}{3})}$$

= 35,00,000 / 60,000 = 175/3

To be absorbed on cost of goods sold = 30,000 x 175/3 = 17,50,000
To be absorbed on closing stock = 10,000 x 175/3 = 5,83,333
To be absorbed on Work in progress = 30,000 x 2/3 x 175/3 = 11,66,667
= 35,00,000

Question.8 Write short note on any three [5x3=15]

(a) Capacity Costs and Relevant Cost
(b) JIT (Just In Time)
(c) Inter-process Profits:
(d) Cost Ledger (maintained in a Costing Department)
(e) 'Cost centre' and 'Cost unit'.

Answer:

(a) Capacity Costs: These costs are normally fixed costs. The cost incurred by a company for providing production, administration and selling and distribution capabilities in order to perform various functions. Capacity cost includes the cost of plant, machinery and building for production, ware houses and vehicles for distribution key personnel for administration. These costs are in the nature long-term costs and are incurred as a result of planning decisions.

Relevant cost: It is a cost which is relevant in various decisions of management. Decision making involves consideration of several alternative courses of action. In this process, whatever costs are relevant are to be taken into consideration. In other words, costs which are going to be affected matter the most and these costs are called relevant costs. Relevant cost is a future cost which is different for different alternatives. It can also be defined as any cost which is affected by the decision on hand.

(b) JIT (Just In Time).

JIT is a Japanese method of integrated philosophy by team approach in which the production would draw the right amount of inventory from the preceding stage to sustain the activity. In this process, the production activity on the actual demand, rather than on a predetermined schedule, since the cycle time for production of various models is given only

to the final assembly point of mixed production line. The production stages are well connected in tree from. JIT results in lower inventory, higher productivity, and faster feedback of defects.

JIT has some benefits which are as follows:

- **Reduction in Inventory Levels:** Unnecessary piling up of Raw Materials, WIP and Finished Goods are avoided. The focus is on production and purchase as per the Firm's requirement.
- **Reduction in wastage of Time:** Wastage of time in various ways like Inspection Time, Machiner Set-Up Time, Storage Time, Queue Time, Defective Rework Time etc. are reduced.
- **Reduction in Scrap Rates:** They will be sharp reductions in the rate of defectives or scrapped units. The workers themselves identify defects and take prompt action to avoid their recurrence.
- **Reduction in OH Costs:** By reducing unnecessary (non-value-added) activities and the associated time and cost-drivers, OH can be greatly reduced e.g. material handling costs, rework costs, facility costs etc.

(c) Inter-process Profits:

The output of one process is transferred to the subsequent process at cost price. However, sometimes the transfer is made at cost plus certain percentage of profit. This is done when each process is treated as a profit centre. In such case, the difference between the debit and credit side of the process account represents profit or loss and is transferred to the P & L Account. The stocks at the end and at the beginning contain an element of unrealized profits, which have to be written back in this method. If the profit element contained in the closing inventory is more than the profit element in the opening inventory, profit will be overstated and vice versa. Profit is realized only on the goods sold, thus to obtain the actual profit the main task would be to calculate the profit element contained in the inventories. In order to compute the profit element, in closing inventory and to obtain the net realized profits for a period, three columns have to be shown in the Ledger for showing the cost, unrealized profit and the transfer price.

(d) Cost Ledger (maintained in a Costing Department)

Cost Ledger maintains the accounts relating to Income and Expenditure. The following accounts are maintained in this ledger.

- Cost Control Accounts-These accounts are maintained to exercise control over the three subsidiary ledgers maintained, such as Stores ledger, work-in-progress ledger, finished goods / stock ledger and also to complete the double entry in cost accounts. The important cost control accounts are as follows:-

  (I) Stores Ledger control account, (II) Work-in-progress ledger control account, (III) Finished goods ledger control account and (IV) General Leger adjustment account.

- Other Accounts-

  They include all other impersonal accounts [real as well as nominal] which effect costs, e.g. wages control account, factory overhead accounts, administration overhead account, selling & distribution overhead account, cost of sales account, etc. Depending

upon the requirement, the following additional accounts may also be maintained: Overhead suspense account, Capital orders account, Service orders account.

(e) Cost Centre and Cost Unit:

CIMA defines Cost Centre as "a production or service, function, activity or item of equipment whose costs may be attributed to cost units. A cost centre is the smallest organisational sub-unit for which separate cost allocation is attempted". A cost centre is an individual activity or group of similar activities for which costs are accumulated. For example in production departments, a machine or group of machines within a department or a work group is considered as cost centre. Any part of an enterprise to which costs can be charged is called as 'cost centre'.

A cost centre can be:

- Geographical i.e. an area such as production department, stores, sales area.
- An item of equipment e.g. a lathe, forklift, truck or delivery vehicle.
- A person e.g. a sales person.

CIMA defines Cost Unit as "a quantitative unit of product or service in relation to which costs are ascertained". A 'cost unit' is a unit of product or unit of service to which costs are ascertained by means of allocation, apportionment and absorption. It is a unit of quantity of product, service or time or a combination of these in relation to which costs are expressed or ascertained. For example, specific job, contract, unit of product like fabrication job, road construction contract, an automobile truck, a table, 1000 bricks etc. The cost units which pass through the cost centre, the direct and indirect costs of the cost centre are charged to the units of production by means of an absorption rate. The unit of output in relation to which cost incurred by a cost centre is expressed is called 'cost unit'. Cost units can be developed for all kinds of organizations, whether manufacturing, commercial or public utility services.