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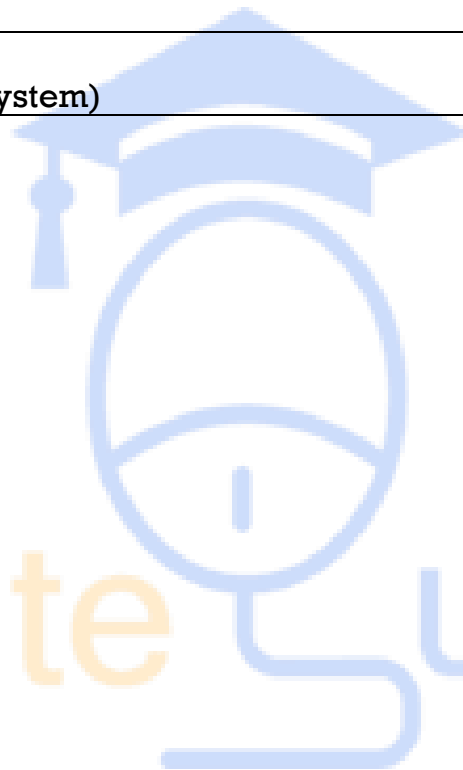
Learning Simplified

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Cost Accounting  
Notes

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# COST SHEET

- Q.1.** From the books of accounts of M/s. Avinash Enterprises, the following details have been extracted for the Quarter ending 31-03-2014.

Particulars	Rs.
Stock of Materials - Opening	270000
Stock of materials - Closing	300000
Purchases of materials	1248000
Direct wages	357600
Direct expenses	120000
Indirect wages	24000
Salaries and administrative staff	60000
Carriage inwards	48000
Carriage outwards	37500
Manager's salaries	72000
General charges	37200
Legal charges for criminal suits	20000
Commission on sales	28000
Fuel	96000
Electricity charges (Factory)	72000
Director's fees	36000
Repairs to plant and machinery	63000
Rent, Rates and taxes – factory	18000
Rent, Rates and taxes – Office	9600
Depreciation on plant & machinery	45000
Depreciation on furniture	3600
Salesmen's salaries	50000
Audit Fees	18000

1. The manager's time is shared between the factory and the office in the ratio of 20:80.
2. Carriage outwards include Rs.7500 being carriage inwards on plant & machinery.
3. Selling price is 120% of the cost price

From the above details prepare detailed cost sheet for the quarter ending 31-03-2014 and ascertained the sales.

- Q.2.** The following particulars have been extracted from the books of Shri Gautam Industries Ltd. for the year 2017.

Particulars	Rs.
Opening stock of raw materials	25000
Purchases of raw materials	85000
Closing stock of materials	40000
Carriage inwards	5000
Wages (direct)	75000
Wages (Indirect)	10000

Other direct charges	15000
Rent & Rates:	
- Factory	5000
- Office	500
Indirect consumption of material	500
Depreciation on plant	1500
Depreciation on office furniture	100
Salary:	
- Office	2500
- Salesman	2000
Other factory expenses	5700
Other office expenses	900
Managing director's remuneration	12000
Other selling expenses	1000
Travelling expenses of salesman	1100
Carriage outwards	1000
Sales	250000
Advance Income tax paid	15000
Advertisement	2000

The Managing director's remuneration is to be allocated Rs.4000 to factory. Rs.2000 to office and Rs.6000 to Selling departments. From the above information prepare a statement of cost showing (a) Prime cost (b) Works cost (c) Cost of production (d) Cost of sales (e) Net profit.

**Q.3.** From the books of accounts of Vibhav Enterprises the following details have been extracted for the year ended 31-03-2014.

Particulars	Rs.
Corporate manager's salary	1110000
Rent of plant	127500
Sales of defective raw materials	8500
Hire charges for special equipment	57000
Office rent	84700
Purchase of raw material	485230
Carriage inward	24325
Indirect materials	235600
Office expenses	41000
Insurance premium for stock of raw materials	22600
Insurance premium for computer	12700
Insurance premium for Delivery van	11500
Opening stock of raw materials	78175
Closing stock of raw materials	76230
Sale of factory scrap	16800
Carriage outward	110000
Depreciation on delivery van	28000
Depreciation on Computer	87300
Salaries to office staff	115300
Salaries to drawings and designing department	185700
Opening work in progress	94300

Closing work in progress	96500
Brand ambassador remuneration	480000
Direct wages - skilled labour	315500
- Unskilled labour	124500
Cost of catalogue printing	57500
Opening stock of finished goods	640000
Closing stock of finished goods	750000
Repairs to delivery van	35500

Other Information :

1. The corporate manager's salaries to be apportioned between the factory and the office in the ratio of 1:9.
2. Selling price is 120% of cost price

From the above details prepare cost sheet showing various elements of cost.

**Q.4.** From the following information, prepared detailed cost statement for the year ended 31-3-2014.

Particulars	Rs.
Opening Stock – Raw materials	20000
- Finished Goods	30000
Purchases of raw materials	1500000
Direct wages	1200000
Power	99500
Carriage on purchase of raw materials	20000
Cost of a special design	50000
Custom duty and octroi on raw materials	60000
Rent and rates – office	50000
- Factory	70000
Telephone expenses	30000
Advertisement	75000
Electricity – office	15000
- Factory	30000
Machinery lost in fire	100000
Depreciation – Plant & machinery	80000
- Delivery van	20000
Income tax	120000
Salaries	250000
Donations	70000
Establishment expenses	100000
Rent of showroom	65000
Interest on loan	45000
Sale of factory scrap	7500
Dividend received	17500
Directors fees	60000
Mailing charges of sale literature	10000
Closing stock – raw materials	185000
- Finished goods	30000

Other Information :

1. 60% of telephone expenses relate to office and 40% to sales department.

2. Salaries to be allocated to the Factory, Office and Sales Department in the ratio 1:2:1.
3. Establishment Expenses are to be apportioned equally between office and sales department.
4. Sales are made to earn profits @ 20% on selling price.

**Q.5.** Following details are furnished by NY Ltd. of expenses incurred during the year ended 31st March, 2014.

Particulars	Rs.
Salesman Salary	6,47,500
Opening Stock of Finished Goods (2000 units)	7,60,000
Director's Fees	9,73,700
Indirect Wages	9,76,300
Repairs to Office Furniture	4,01,700
Works Managers Salary	11,94,700
Showroom Expenses	10,68,750
Depreciation on Computer	12,12,900
Indirect Materials	7,31,900
Depreciation on Plant and Machinery	4,77,100
Advertisement	15,33,750
Office Salary	7,91,700
Direct Wages	10,01,000
Direct Materials	18,82,400
Direct Expenses	4,96,600
Closing Stock of Finished Goods (3000 units)	?

Other Information:

1. Closing stock of finished goods to be valued at cost of production.
2. Profit desired on sales is 20%.
3. Number of units sold during the year was 25000.

Prepare Cost Sheet showing the various elements of cost both in total and per unit and also find out the total profit and per unit profit for the year ended 31st March, 2014.

**Q.6.** The State Government granted licence to Sweet Sugar Ltd. To manufacture and sell sugar with a stipulation that 40% of the output should be sold to the State Government at a controlled price of Rs.3,000 per ton and the balance Output can be sold in the open market at any price. Following are the details of Sweet Sugar Ltd. for the year ended 31st March, 2014. During the year 3,600 tons Sugarcane was consumed @ Rs.1,000 per ton. Direct labour amounted to Rs.825 per ton of sugar produced. The details of other expenditure are as follows:-

Particulars	Rs.
Direct Expenses	4,20,000
Telephone Charges	3,52,695
Office Computer Purchased	2,75,350

Factory Rent and Insurance	3,54,760	
Machinery purchased	4,25,560	98,847
Machinery repairs	3,37,650	
Commission on Sales	2,19,588	
Factory Salaries	1,54,090	
Carriage Outward	1,94,450	
Packing Expenses	1,65,895	
Bank Interest	2,61,880	
Factory Electricity	1,06,850	
Delivery Van Expenses	3,80,125	
Coal Consumed	2,49,600	
Depreciation on Machinery	2,04,180	
Depreciation on Computer	1,57,360	
Depreciation on Delivery Van	1,89,325	
Office Salaries	1,13,000	
Printing and Stationery		

During the year 2,400 tons of sugar was produced. The Company's Profit target for the year, for fixing the open market selling price on the basis of cost sheet, is 10% of its average paid-up Capital of Rs.1, 42, 56,000. Prepare cost sheet and find various components of total cost and per unit cost and suggest the Selling Price for Open-Market.

**Q.7.** Prepare a cost sheet showing the total and per tonne cost of paper manufactured by Times Paper Mills Ltd. for the month of March, 2014. There were 26 working days in the month. Also find the profit earned by the company. The details are as under:-  
Direct Raw Materials: Paper pulp : 6,000 tons @ Rs.900 tonne.

Direct Labour:-

280 Skilled workmen	: Rs.250 per day
300 Semiskilled workmen	: Rs.150 per day
470 Unskilled workmen	: Rs.100 per day

Direct Expenses:-

Special equipments hire charges	: Rs.12, 000 per day
Special dyes	: Rs.250 per tonne of total raw material input
Work overheads : Variable	: @ 50% of direct wages
: Fixed	: Rs.2, 70,000 p.m.
Administration overheads	: @ 12% of works cost
Selling and distribution overheads	: Rs.80 per tonne sold.
Opening stock of paper	: 500 tonnes valued @ Rs.2,501.60 per ton
Closing stock of paper	: 300 tonnes valued at cost of production.

The paper is sold @ Rs.3, 000 per tonne.

**Q.8.** Sagar manufacturing company gives you the following particulars for the year 2012. Production and sales during the year was 20,000 units.

Particulars	Rs.	Particulars	Rs.
Material	5,00,000	Factory Overheads	

Direct Wages	3,00,000	-Fixed	2,00,000
Administrative Overheads (Fixed)	2,00,000	-Variable	4,00,000
Sales Profit	24,00,000	Selling and Distribution Overheads	
	5,00,000	-Fixed	1,20,000
		-Variable	1,80,000

The company has worked to its maximum capacity of 20,000 units during the year 2012. The management has decided to increase production capacity to 30,000 units for the year 2013 and it is estimated that:

1. There will be all round rise in all variable expenditure by 10%.
2. There will be increase of 20% in all fixed overheads.
3. There will be no need to change the selling price for the year 2013. Prepare Cost Sheet for the year 2012 with cost per unit column and also prepare estimated Cost Sheet for the year 2013 with cost per unit column.

**Q.9.** Super Vision Company furnishes you with the following information about its 1000 TV sets manufactured and sold during the year:

Particulars	Rs.	Particulars	Rs.
Materials	18,00,000	Office and Administration Expenses	6,80,000
Direct Wages	10,00,000	Selling & Distribution Expenses	1,20,000
Power and Stores	2,40,000	Sale of Scrap	40,000
Indirect Wages	3,00,000	Sale of 1000 TV sets	62,00,000
Factory Lighting	1,20,000	Repairs and depreciation of Machinery	2,00,000
Cost of rectifying defective work	60,000		

Prepare the cost sheet for the above year, showing the elements of cost per unit,. Prepare also the estimated cost sheet for the next year assuming that:

1. Materials cost and direct wages cost will increase by 10% and 15% respectively.
2. Factory overheads will be recovered as a percentage of direct wages, as last year.
3. Office overheads and selling overheads will be recovered as percentage of works cost, as last year, and
4. 1500 TV sets will be produced and sold at Rs.6,600 each in the next year.

**Q.10.** –

**Q.11.** –

**Q.12.** Following information is available from cost records for the year ended 31st March, 2014:

Direct Material Rs.36 Per Unit

Direct Labour Rs.28 Per Unit

Chargeable Expenses Rs.11 Per Unit



Factory Overheads Fixed Rs.15,00,000,  
 Variable Rs.10 Per Unit  
 Office Overheads Fixed Rs.12,50,000  
 Selling Overheads Fixed Rs.5,00,000, Variable Rs.25Per Unit  
 Units Produced and Sold 50,000  
 Selling Price Per Unit Rs.210.

Following changes are anticipated during the year ended 31st March, 2015.

1. Production and Sales will increase by 60%.
2. Direct Material cost per unit will increase by 12.5%.
3. Direct Labour per unit will decrease by 5%.
4. Chargeable expenses per unit will decrease by 10%.
5. Variable factory overheads per unit will increase by 25%.
6. Variable selling overheads will decrease by 25%.
7. All fixed overheads will increase by 20%.
8. 75% of the output will be sold in Domestic Market at a profit of 20% on sales.
9. Balance 25% output will be sold in Export Market at a profit of 50% on sales.

You are required to:

- (i) Prepare a Cost Sheet for the year ended 31st March,2014 and estimated cost sheet for the year ended 31st March, 2015, showing total and per unit cost.
- (ii) Calculate total and per unit profit for the year ended 31st March, 2014.
- (iii) Calculate total sales and profit for Domestic Market and Export Market.

**Q.13.** M/s. Vidya Pen Company manufactures two types of pens “Sharada” and “Viveka”. The particulars for the year ended 31st March, 2014 were as follows:

Particulars	Rs.
Direct Material	5,00,000
Direct Wages	2,25,000 75,000
Direct Expenses	10,00,000
Total Sales	

There was no work-in-progress at the beginning or at the end of the year. On the study it is ascertained that-

1. Direct Material per unit in “Sharada Pen” consists twice as much as that in type “Viveka Pen”.
2. The Direct Wages per unit for “Viveka Pen” were 40% of those for “Sharada Pen”.
3. Direct Expenses were same per unit for Viveka as well as Sharade Pen.
4. Factory Overheads were 20% of the prime cost.
5. Administrative Overheads were 50% of Direct Wages.
6. 2,500 units of Sharada Pen were produced of which 2,000 were sold and 5,000 units of Viveka Pen were produced of which 4,000 were sold, during the year.
7. Selling Overheads were Rs.8 per unit for Sharada Pen and Rs.9 per unit for Viveka Pen.

8. Selling price per unit for sharada Pen was Rs.250 and Viveka Pen was Rs.125 respectively.

You are required to prepare a statement showing cost and profit in total as well as per unit for Sharada Pen and Viveka Pen.

**Q.14.** From the following information, prepare a cost sheet for the month of December, 2014.

Particulars	Rs.
Stock on Hand – 1stDec. 2014:	
Raw Materials	25,000
Work-in-Progress	8,200
Finished Goods	17,300
Raw Materials consumed during Dec. 2014	21,800
Works Cost for the month (after adjusting work-in-progress)	48,400
Cost of Production of Goods sold	53,200
Purchase of Raw Materials	21,900
Carriage on Purchases	1,100
Sale of Finished Goods	72,300
Direct Wages	17,200
Direct Expenses	1,200
Factory Overheads	9,100
Administration Overheads	3,200
Selling and Distribution Overheads	4,200

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# RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

**Q.1.** From the following particulars, prepare Reconciliation Statement and Ascertain Costing Profit/Loss. Net Profit as per financial P & L A/c. Rs.50,000, Opening Stock was overvalued by Rs.2,000 in Cost Accounts as compared to financial accounts. Administrative overheads charged in Financial Books Rs.20,000 but recovered in Cost Rs.40,000.  
Income Tax Provision Rs.1,200.  
Notional Salary of Proprietor in Cost Rs.20,000.  
Interest Received Rs.12,000.  
Closing Stock as per financial books Rs.16,200.  
Whereas in Cost books it was Rs.19,000.

**Q.2.** From the following, prepare Reconciliation Statement of M/s. XYZ and Company as on 30-6-2014:  
(1) Net Profit as per Financial Accounts Rs.40,340.  
(2) Income Tax Provision made Rs.30,000.  
(3) Materials Purchased of 5,000 units were recorded in cost at standard cost Rs.24 per unit whereas in Financial it was recorded at actual cost Rs.22 per unit.  
(4) Old debts recorded Rs.20,500.  
(5) Loss on sale of furniture was Rs.4,120.

**Q.3.** From the following information you are required to prepare a statement reconciling the results of Cost Books:

Particulars	Rs.
Net Profit as per Financial Books	51,052
Works overheads under recovery in cost book	1,001
Depreciation charged in Financial Books	13,000
Depreciation charged in Cost Book	14,326
Obsolescence loss charged in Financial Books Only	2,021
Income-tax provided in Financial Books only	2,626
Interest received but not recorded in Cost Book	3,031
Bank interest debited in Financial Books only	292

**Q.4.** Following is the summarized Profit and Loss Account of XYZ Industries for the year ended 31-03-2014.

Profit and Loss Account for the year ended 31<sup>st</sup> March 2014

Particulars	Rs.	Particulars	Rs.
To Materials consumed	2,00,000	By Sales (12,000 units)	4,80,000
To Wages	75,400	By Closing Stock (Finished Goods 3000 units)	66,000
To Factory Expenses 52,400	54,600	By Interest on Securities	17,000
Add: Outstanding 2,200	52,500	By Profit on Sale of Assets	1,20,000
To Administrative Overheads			
To Selling and Distribution Overheads	96,000		
To Interest on Loans	14,000		
To Income Tax	7,500		
To Net Profit	1,83,000		
	6,83,000		6,83,000

The cost accounting record for the above period showed the following:

(a) Material consumed @ Rs.10 per unit produced.

- (b) Direct Wages @ Rs.6 per unit produced.  
(c) Factory overheads were absorbed @ 25% of Prime Cost.  
(d) Administrative overheads were absorbed @ Rs.5 per unit produced.  
(e) Selling and Distribution overheads were absorbed @ Rs.7 per unit sold.  
You are required to prepare the detailed Cost Sheet for the year ended 31-03-2014 and a Statement of Reconciliation.

**Q.5.** RST Ltd. has furnished the following information from the financial books for the ended 31<sup>st</sup> March, 2012.

<b>Dr.</b>		<b>Trading and Profit and Loss A/c</b>		<b>Cr.</b>	
<b>Particulars</b>	<b>Rs.</b>	<b>Particulars</b>	<b>Rs.</b>		
To Opening Stock (Finished goods 2500 units)	2,50,000	By Sales (47,500 units)	59,85,000		
To Raw Materials	20,80,000	By Closing Stock (Finished Goods 5000 units)	5,00,000		
To Direct Wages	15,15,000	By Commission Received	35,000		
To Factory Expenses	10,18,000	By Bad Debts Recovered	12,000		
To Office and Administrative Expenses	8,45,000	By Net Loss	36,000		
To Selling and Distribution Expenses	7,00,000				
To Goodwill w/off	60,000				
To Loss on Sale of Investments	1,00,000				
	65,68,000				
				65,68,000	

The following information is revealed form the cost records for year ended 31<sup>st</sup> March, 2012:

- (a) Raw material consumption is Rs.40 per unit of Production.  
(b) Direct wages are 70% of Direct Materials.  
(c) Factory overheads are recovered @ 50% of Direct Materials.  
(d) Administrative overheads are taken @ 20% of Works cost.  
(e) Selling and Distribution overheads are recovered Rs.15 per unit.  
(f) Opening stock of Finished goods is valued at Rs.101.80 per unit.  
(g) Closing stock of Finished goods is to be valued at cost of Production.  
(h) Selling price is recorded at Rs.125 per unit.

**Prepare:**

- (i) Detailed Cost Statement showing total cost, per unit cost and profit.  
(ii) Statement of Reconciliation.

**Q.6.** From the following figures prepare a reconciliation statement:

<b>Particulars</b>	<b>Rs.</b>
Net loss as per Financial records	2,08,045
Depreciation charged in Financial records	11,200
Depreciation recovered in Costing	12,500
Value of Opening Stock : Cost Accounts	52,600
Financial Accounts	54,000
Interest charged in cost accounts but not in Financial Accounts	6,000
Preliminary expenses written off in Financial Accounts	800

Calculate the figure of profit or loss as per cost records.

# MATERIAL COST

**Q.1.** Keep stock record on FIFO, and Weighted Average basis from the following transactions:

Date	Units	Rate Per Unit (Rs.)	Date	Units	Rate Per Unit (Rs.)
<b>Purchases: March 2014</b>			<b>Sales: March 2014</b>		
01	500	18	02	200	22
04	700	20	07	500	25
09	900	18	11	400	21
15	300	25	18	800	28
25	200	20	27	500	25
31	500	25			

Find out cost of goods sold and the profit.

**Q.2.** M/s Desai & Co. a trade of Plastic Toys had 12,000 toys valued at Rs.3 per toy. His purchases and sales during first six months ending 31<sup>st</sup> December, 2013 were as under:

On 22 <sup>nd</sup> July, 2013	Sales	5,000 Toys @ Rs.20 each
On 23 <sup>rd</sup> July, 2013	Purchased (Carriage Inward Rs.1,000)	10,000 Toys @ Rs.15 each
On 25 <sup>th</sup> October 2013	Sales	8,000 Toys @ Rs.24 each
On 26 <sup>th</sup> October 2013	Purchased (Carriage Inward Rs.1,200)	12,000 Toys @ Rs.18 each
On 31 <sup>st</sup> December 2013	Sales	13,000 Toys @ Rs.29 each

You are required to ascertain:

Cost of stock on hand as on 31<sup>st</sup> Dec.2013 under each of the following methods:

(1) FIFO, (2) Weighted Average

**Q.3.** The following is a summary of the receipts and issue of materials in a factory during January.

1	Opening balances 500 units @ Rs.25 per unit
3	Issue 70 units
4	Issue 100 units
8	Issue 80 units
13	Received from supplier 200 units @ Rs.24.50 per unit
14	Returned to store 15 units @ 24 per unit
16	Issue 180 units

Work out on the basis of First-in-First-out. On the 15<sup>th</sup> there was a shortage of five units.

**Q.4.** Prepare a Stores Ledger Account from the following information adopting FIFO method of pricing of issues of materials.

March 2012	1	Opening Balance 500 tonnes @ Rs.200
	3	Issue 70 tonnes
	4	Issue 100 tonnes
	5	Issue 80 tonnes
	13	Received from suppliers 200 tonnes @ Rs.190
	14	Returned from Department A 15 tonnes
	16	Issued 180 tonnes
	20	Received from suppliers 240 tonnes @ Rs.195
	24	Issue 300 tonnes
	25	Received from suppliers 320 tonnes @ Rs.200
	26	Issue 115 tonnes
	27	Returned from Department B 35 tonnes
	28	Received from suppliers 100 tonnes @ Rs.200

- Q.5.** From the following particulars find out the Economic Order Quantity:
- |   |                 |
|---|-----------------|
| (i) Annual Demand                       | 12,000 units    |
| (ii) Ordering cost                      | Rs.90 per order |
| (iii) Inventory carrying cost per annum | Rs.15           |
- Q.6.** From the following information, calculate Economic Order Quantity.  
 Semi-Annual Consumption 6,000 units  
 Purchase price of input unit Rs.25  
 Ordering cost per order Rs.45  
 Quarterly carrying cost 3%
- Q.7.** The Purchase Manager of an organization has collected the following data for one of the A class items.
- |  |             |
|--|-------------|
| Interest of the locked up capital          | 20%         |
| Order processing cost (Rs.) for each order | Rs.100      |
| Inspection cost per lot                    | Rs.50       |
| Follow up cost for each order              | Rs.80       |
| Pilferage while holding inventory          | 5%          |
| Other holding cost                         | 15%         |
| Other procurement cost for each order      | Rs.170      |
| Annual Demand                              | 1,000 units |
| Cost per item                              | Rs.10       |
- What should be the EOQ?
- Q.8.** A company manufactures a product from a raw material, which is purchased at Rs.60 per kg. The company incurs a handling cost of Rs.360 plus freight of Rs.390 per order. The incremental carrying cost of inventory of raw material is Rs.0.50 per kg per month. In addition, the cost of working capital finance on the investment in inventory of raw material is Rs.9 per kg per annum. The annual production of the product is 1,00,000 units and 2.5 units are obtained from one kg of raw material. Calculate the economic order quantity of raw materials.
- Q.9.** The following information relating to a type of raw material is available:
- |                         |             |
|-------------------------|-------------|
| Annual demand           | 2,000 units |
| Unit price              | Rs.20.00    |
| Ordering cost per order | Rs.20.00    |
| Storage cost            | 2% p.a.     |
| Interest rate           | 8% p.a.     |
- Calculate economic order quantity and total annual inventory cost of the raw material.
- Q.10.** X Ltd. manufactures a special product 'ZED' and provides the following information:  
 Demand of ZED is 1,000 units per month.  
 Semi-annual carrying cost – 6%  
 Raw material required per unit to finished product – 2 kg  
 Ordering cost per order – Rs.90  
 Purchase price of input unit – Rs.25 per kg  
 Required: Calculate (a) Economic order quantity and (b) Total Annual Carrying and Ordering Cost at that quantity.
- Q.11.** ABC Co. buys a lot of 125 boxes which is a three month supply. The cost per box Rs.125 and ordering cost is Rs.250 per order. The inventory carrying cost is estimated at 20% of unit value per annum.

**You are required to ascertain:**

- (i) The total annual cost of existing inventory policy.
- (ii) How much money would be saved by employing economic order quantity?

**Q.12.** KL Limited produces product 'M' which has a quarterly demand of 8,000 units. The product requires 3 kgs quantity of material 'X' for every finished unit of product. The other information are follows:

Cost of material 'X': Rs.20 per kg

Cost of placing an order: Rs.1,000 per order

Carrying cost: 15% per annum of average inventory

**Required:**

- (i) Calculate the Economic Order Quantity for material 'X'.
- (ii) Should the company accept an offer of 2 percent discount by the supplier, if he wants to supply the annual requirement of material 'X' in 4 equal quarterly installments?

**Q.13.** The purchase Department of your organization has received an offer of quantity discounts on its order of materials as under:

Price per tonne (Rs.)	Tonnes
1,400	less than 500
1,380	500 and less than 1,000
1,360	1,000 and less than 2,000
1,340	2,000 and less than 3,000
1,320	3,000 and above

The annual requirement of the material is 5,000 tonnes. The delivery cost per order is Rs.1,200 and the annual stock holding cost is estimated at 20 percent of the average inventory.

The purchase Department wants you to consider the following purchase options and advise which among them will be the most economical ordering quantity, presenting the relevant information in a tabular form.

The purchase quantity options to be considered are 400 tonnes, 500 tonnes, 1000 tonnes, 2000 tonnes and 3,000 tonnes.

**Q.14.** The following data are available in respect of material X for the year ended 31<sup>st</sup> March, 2015:

Opening Stock	Rs. 90,000
Purchases during the year	Rs.2,70,000
Closing Stock	Rs.1,10,000

Calculate:

- (1) The Inventory Ratio
- (2) The number of days for which the average inventory is held.

**Q.15.** From the following information calculate stock turnover ratio:

Gross Sales	Rs.5,00,000
Sales Returns	Rs.25,000
Opening Stock	Rs.70,000
Closing Stock at Cost	Rs.85,000
Purchase	Rs.3,00,000
Direct Expenses	Rs.1,00,000

**Q.16.** From the following data for the year ended 31<sup>st</sup> December, 2014, calculate the inventory turnover ratio of two items and put forward your comments on them:

Particulars	Material X (Rs.)	Material Y (Rs.)
Opening Stock (1 <sup>st</sup> January, 2014)	20,000	18,000
Purchases during the year	1,04,000	54,000
Closing Stock (31 <sup>st</sup> December, 2014)	12,000	22,000



# LABOUR COST

- Q.1.** Standard production @ 20 units per hour, general wage rate Rs.2.00 per hour, wages rate if work executed below standard: 80% of general rate on execution of work equal to standard 120% of, general rate; production in 8 hrs of one day by Mr. A:150 units and by Mr. B:200 units. Compute total remuneration payable to Mr. A and Mr. B under the Taylor plan.
- Q.2.** Calculate the earnings of workers A and B under Straight Piece Rate system and Taylor's Differential Piece Rate system from the following particulars:-  
Normal rate per hour – Rs.1.80  
Standard time per unit – 20 seconds  
Differential to be applied are:  
80% of the piece rate below the standard;  
120% of the piece rate above standard.  
A produced 1,300 units per day of 8 hours; and B 1,500 units per day of 8 hours.
- Q.3.** The following particulars apply to a particular job:  
Standard production per hour – 6 units  
Standard working hours – 8  
Normal rate per hour – Rs.1.20.  
Mohandas produced 32 units  
Ram produces 42 units  
Peas ad produces 50 units  
Calculate the wages of these workers under Merrick Differential Piece Rate System.
- Q.4.** The following are the particulars applicable to a process:  
Time Rate – Rs.8 per hour  
High Task – 200 units per week.  
In a 40 hour week, the production of the workers was:  
A – 180 units; B – 200 units; C – 205 units  
Production above standard-high piece rate of Rs.2.00 per unit.  
Calculate the total earnings of the workers under Gantt's Task Bonus system.
- Q.5.** Rate per hour = Rs.1.50  
Time allowed for the job = 16 hrs.  
Time taken = 12 hrs.  
Calculate the total earnings of the workers under Halsey Permit Plan. Find out effective rate of earnings also.
- Q.6.** Calculate bonus payable under Rowan plan where time allowed is 24 hours, time taken is 18 hours and time rate is Rs.20 per hr.
- Q.7.** A worker produced 200 units in a week's time. The guaranteed weekly wage payment for 45 hours is Rs.81. The expected time to produce one unit is 15 minutes which is raised further by 20% under the incentive scheme. What will be the earnings per hour of that worker under Halsey (50% sharing) and Rowan bonus schemes?
- Q.8.** Calculate the earnings of a worker under (i) Rowan Plan (ii) Halsey Plan from the following particulars:  
(1) Hourly rate of wages guaranteed 0.50 pause per hour.  
(2) Standard time for producing dozen articles – 3 hours.  
(3) Actual time taken by the worker to produce 20 dozen articles – 48 hours.



**Q.9.** A worker takes 6 hours to complete a job under a scheme of payment by results. The standard time allowed for the job is 9 hours. His wage rate is Rs.1.50 per hours. Material cost of the job is Rs.16 and the overheads are recovered at 150% of the total direct wages. Calculate the factory cost of job under (a) Rowan and (b) Halsey systems of Incentive.

**Q.10.** Calculate normal overtime and total wages payable to a worker from the particulars given below:

Days	Hours Worked
Monday	10
Tuesday	9
Wednesday	8
Thursday	12
Friday	9
Saturday	4

Normal working hours = 8 per day

Normal rate = Rs.50 per day

Overtime rate = up to 9 hours per day-single rate; beyond 9 hours a day-double rate.

**Q.11.** From the following data prepare a statement showing the cost per day of 8 hours of engaging a particular type of labour:

- (a) Monthly salary (basic + dearness allowance) – Rs.200
- (b) Leave salary payable to the workman – 5% of salary
- (c) Employer’s contribution to P.F. – 8% of salary [item (a) and (b)]
- (d) Employer’s contribution to State Insurance – 2½ % of salary (item a + b)
- (e) Expenditure on amenities – Rs.17.95 per head per month
- (f) No. of working hours in a month – 200

**Q.12.** ‘A’, an employee of XYZ Co. gets the following emoluments and benefits:

- (a) Salary Rs.2,500 per month
- (b) Dearness Allowance Rs.5,250 per month
- (c) Employers’ contribution to Provident Fund 8% of Salary and D.A.
- E.S.I. 4% of Salary and D.A.
- (d) Bonus 20% of Salary and D.A.
- (e) Other allowances Rs.27,250 per annum

A works for 2,400 hours per annum, out of which 400 hours are non-productive but treated as normal idle time. You are requested to find out the Effective hourly cost of ‘A’.

# OVERHEADS

- Q.1.** A factory has 3 production departments (P1, P2, P3) and 2 service departments (S1 & S2). The following overheads and other information are extracted from the books for the month of January 2014.

Expense	Amount (Rs.)	Expense	Amount (Rs.)
Rent	6,000	Supervision	9,000
Repair	3,600	Fire Insurance for Stock	3,000
Depreciation	2,700	ESI contribution	900
Lighting	600	Power	5,400

Particulars	P1	P2	P3	S1	S2
Area sq. ft.	400	300	270	150	80
No. of workers	54	48	36	24	18
Wages	18,000	15,000	12,000	9,000	-
Value of plant	72,000	54,000	48,000	6,000	6,000
Stock Value	45,000	27,000	18,000	-	-
Horse power of plant	600	400	300	150	50

Allocate or apportion the overheads among the various departments on suitable basis.

- Q.2.** The Modern Company is divided into departments: A, B, and C are production departments and D is service department. The actual costs for a period are as follows:

Particulars	Rs.	Particulars	Rs.
Rent	10,000	Fire insurance (Stock)	5,000
Repairs to plant	6,000	Power	9,000
Depreciation of plant	4,500	Light	1,000
Supervision	15,000	Employer's Insurance Liability	1,500

The following information are available in respect of the four departments:

Particulars	Departments			
	A	B	C	D
Area (sq. mtr.)	1,500	1,100	900	500
Number of employees	20	15	10	15
Horsepower of machines	800	500	200	-
Total wages (Rs.)	60,000	40,000	30,000	20,000
Value of plant (Rs.)	2,40,000	1,80,000	1,20,000	60,000
Value of Stock (Rs.)	1,50,000	90,000	60,000	-
Light points (Nos.)	40	30	20	10

Apportion the costs of the various departments by the most equitable method.

- Q.3.** The following cost information for a period is available for a small engineering unit:

**(a) Allocated expenditure**

	Total (Rs.)	Allocated		Service Departments	
		Production Departments		General Service	Stores
		Machine Shop	Assembly		
Indirect Wages	29,300	8,000	6,000	4,000	11,300
Stores consumed	6,700	2,200	1,700	1,100	1,700
Supervisory Salaries	14,000	-	-	14,000	-
Other Salaries	10,000	-	-	10,000	-

**(b) Expenditure to be apportioned**

Power and Fuel	15,000
Rent	15,000

Insurance	3,000
Depreciation	1,00,000

**(c) Additional Information available**

	Floor Area (Sq. ft.)	H.P. Hrs.	No. of Employees	Investment (Rs.)
Machine Shop	2,000	3,500	30	6,40,000
Assembly	1,000	500	15	2,00,000
General Plant	500	-	5	10,000
Stores	1,500	1,000	10	1,50,000

You are required to prepare an overhead primary distribution statement in detail.

**Q.4.** In an engineering factory particulars have been extracted for the year ended 31-12-2013:

Particulars	Production Dept.			Service Dept.	
	A	B	C	X	Y
Direct Wages (Rs.)	30,000	45,000	60,000	15,000	30,000
Direct Material (Rs.)	15,000	30,000	30,000	22,500	22,500
Staff number	1,500	2,250	2,250	750	750
Electricity	6,000	4,500	3,000	1,500	1,500
Asset Value (Rs.)	60,000	40,000	30,000	10,000	10,000
Light Points	10	16	4	6	4
Area (Square meters)	150	250	50	50	50

The expenses for the period were as follows:

Particulars	Rs.	Particulars	Rs.
Power	1,100	Depreciation	30,000
Lighting	200	Repairs	6,000
Stores Overheads	800	General overheads	12,000
Welfare to Staff	3,000	Rent and Taxes	550

Apportion the expenses of service department Y according to direct wages and those of service department X in the ratio 5 : 3 : 2 to the production departments.

You are required to prepare an Overheads Distribution Summary.

**Q.5.** Radha Enterprises has three production departments A, B and C and one service department S.

The following figures are available for one month of 25 working days of 8 hours each day.

All departments worked all these days with full attendance.

Expenses	Total (Rs.)	Service Dept. (Rs.)	Production Department		
			A (Rs.)	B (Rs.)	C (Rs.)
Power and Lighting	1,100	300	200	250	350
Supervisor's Salary	1,500	-	-	-	-
Rent	600	-	-	-	-
Canteen Expenses	500	-	-	-	-
Others	1,100	140	210	470	280
	4,800				

The following additional information is available:

Particulars	Service Dept.	Production Department		
		A	B	C
Supervisor's Salary	20%	20%	30%	30%
Floor Area in sq. feet	800	700	900	600
Number of workers	20	30	30	20
Service rendered by service department to production department		20%	30%	50%

You are required to calculate the labour hour rate of each of the department A, B and C.

# PROCESS COSTING

- Q.1.** A product passes through 3 distinct processes to completion. During December 2013, 500 units were produced. The cost books show the following information:

Particulars	Process A	Process B	Process C
Materials	3,000	1,500	1,000
Labour	2,500	2,000	1,500
Direct Expenses	500	2,160	905

The indirect expenses for the period were Rs. 1,400 to be apportioned on the basis of Labour Cost. The residue of Process B was sold for Rs. 145. Residue of Process C was sold for Rs. 166. Prepare the Process Accounts showing the cost of each process and the cost of production of the finished product per unit.

- Q.2.** Varun Motors Ltd., manufactures a component of a motor car which passes through three processes. The normal waste for process 1 is 20% of the units introduced. The wastage (normal and abnormal) is sold at Rs. 50 per unit. 2,000 units were introduced in this process at Rs. 100 per unit. The additional expenditure incurred was Rs.60,000. Prepare Accounts showing the cost of production per unit under the following conditions:  
 (a) If the production is 1,600 units. (b) If the production is 1,500 units. (c) If the production is 1,800 units.  
 Show your calculations relating to the cost of production separately.

- Q.3.** The product of a company passes through three distinct processes to completion. These processes are known as X, Y and Z. From the past experience, it is ascertained that wastage is incurred in each process as under: Process X- 2%, Process Y – 4%, Process Z - 10%. The wastage at each process processes scrap value. The wastage of processes X and Y is sold at Rs. 2.50 per unit, and that of process Z at Rs. 5.00 per unit. The output of each process passes immediately to the next process and finished units are transferred from Process Z into stock. The following information is obtained.

Particulars	X (Rs.)	Y (Rs.)	Z (Rs.)
Material	2,70,000	2,60,000	1,20,000
Wages	4,30,000	2,40,000	1,30,000
Direct Expenses	1,37,500	1,45,000	1,80,000

50,000 units were put in process X at a cost of Rs. 10 per unit. The output of each process is as follows:

Process X – 48,750 units, Process Y – 47,000 units, Process Z – 42,000 units.

There is no stock of work in progress in any process. Prepare the process accounts, abnormal gain account and abnormal loss account.

- Q.4.** A product passes through three processes. The following cost data have been extracted from the books of a manufacturing company.

Particulars	Total (Rs.)	Process I	Process II	Process III
Materials	1,50,840	52,000	39,600	59,240
Direct Wages	1,80,000	40,000	60,000	80,000
Production Overhead	1,80,000	-	-	-

10,000 units at Rs. 6/- each were introduced into Process I. There was no stock of material or work-in-progress at the beginning or at the end. The output of each process passes directly to the next process and finally to the finished stock. Production overhead is recovered at 100% of Direct wages.

The following additional data are obtained:

Process	Output Unit	Percentage of Normal Loss to Input	Value of scrap per unit
I	9,500	5%	4

II	8,400	10%	8
III	7,500	15%	10

Prepare Process Accounts and Abnormal Loss Account / Gain Account and Normal Loss Account.

- Q.5.** Product 'A' is obtained after it is processed through process X, Y, Z.  
The following cost information is available for the month ended 31<sup>st</sup> March, 2014.

Particulars	Processes		
	X	Y	Z
Number of Units introduced in the process	500	-	-
Rate per Units introduced	04	-	-
Cost of Material	2,600	2,000	1,025
Direct Wages	2,250	3,680	1,400
Production Overheads	2,250	3,680	1,400
Normal Loss (% on units introduced in each process i.e. input)	10%	20%	25%
Value of Scrap per unit	02	04	05
Output in units	450	340	270

There is no stock in any process.

You are required to prepare the Process Accounts.

- Q.6.** Product A is manufactured after it passes through three distinct processes. The following information is obtained from the records of a company for the year ended 31<sup>st</sup> December, 2013.

Particulars	Process I (Rs.)	Process II (Rs.)	Process III (Rs.)
Direct Materials	2,500	2,000	3,000
Direct Wages	2,000	3,000	4,000

Product overheads are Rs. 9,000, 10,000 units at Rs. 5 each were introduced to Process I. There was no stock of materials or work in progress at the beginning and at the end of the year. The output of each process passes direct to the next process and finally to the finished stock A/c. Production overheads are recovered on 100% of direct wages. The following additional data is available:

Particulars	Output during the week	Percentage of normal loss to input	Value of scrap per unit (Rs.)
Process I	950	5%	3
Process II	840	10%	5
Process III	750	15%	5

Prepare Process Cost Abnormal Gain or Loss Accounts for the year ended 31<sup>st</sup> December, 2013.

- Q.7.** Product X is obtained after it is processed through three distinct processes.  
The following information is available for the month of March, 2014:

Particulars	Total Rs.	Process		
		A	B	C
Material Consumed	22,500	10,400	8,000	4,100
Direct Labour	29,320	9,000	14,720	5,600
Production Overheads	29,320	-	-	-

2,000 units at Rs.4 per unit were introduced in Process A. Production overheads to be distributed as 100% on direct labour. The actual output and normal loss of the respective process are:

Processes	Output in units	Normal Loss on Inputs	Value of Scrap per unit (Rs.)
Process A	1,800	10%	2.00
Process B	1,360	20%	4.00
Process C	1,080	25%	5.00

There is no stock or work-in-progress in any process. You are required to prepare process Account.

- Q.8.** A product of a manufacturing concern passes two processes viz. A and B and then to finished stock. The following figures have been taken from its books for the year ended 31<sup>st</sup> March, 2013.

Particulars	Process A	Product B
Raw Materials introduced in Process (Units)	10,000	700
Cost of Raw Materials introduced (per unit) (Rs.)	125	200
Wage (Rs.)	2,80,000	1,00,000
Machine Expenses (Rs.)	20,000	10,000
Direct Expenses (Rs.)	10,000	10,000
Other Factory Expenses (Rs.)	45,000	22,500
Indirect Materials (Rs.)	5,000	10,000
Normal Loss in weight (% on total units introduced in each process)	5%	5%
Normal Scrap (% on total units introduced in each process)	10%	10%
Realisable value of scrap (per 10 units) (Rs.)	800	2,000
Output (units)	8,300	7,800

Prepare Process Accounts, Abnormal Loss Account and Abnormal Gain Account.

- Q.9.** M/s. XYZ and company manufacture a chemical which passes through three processes. The following particulars gathered for the month of January, 2014:

Particulars	Process I	Process II	Process III
Materials (litre)	400	208	168
Materials Cost	Rs.38,400	Rs.18,800	Rs.6,000
Wages	Rs.7,680	Rs7,600	Rs.2,200
Normal Loss (% of input)	4%	5%	5%
Scrap Sale Value	-	Rs.3 per Litre	-
Output transferred to next process	50%	40%	-
Output transferred to Warehouse	50%	60%	100%

Overheads are charged @ 50% of Direct Wages. You are required to Prepare Process Accounts.

- Q.10.** Abad Chemicals Co. Ltd. produced three types of chemicals during the month of March, 2014 by three consecutive processes. In each Process 2% of the total weight put in is lost and 10% is scrap. Scrap of Process I and Process II realize Rs. 100 a ton and that of Process III Rs. 20 a ton. The products of the processes are dealt with as follows:

Particulars	I	II	III
Passed on the next process	75%	50%	-
Sent to warehouse for sale	25%	50%	100%
Details of Cost:			
Raw Materials used: Tonnes	1,000	140	1,348
Rs.	1,20,000	28,000	1,07,840
Direct Wages	20,500	18,520	25,000
General Expenses	10,300	7,240	4,320

Prepare Process Cost Accounts showing cost per ton of each process.

- Q.11.** The following details for the year ending 31<sup>st</sup> December, 2013 are available from the books of a trader having three workshops and a wholesale warehouse.

Particulars	Workshop A	Workshop B	Workshop C
Raw Materials Used (Tonnes)	250	152	145
Cost per Tonne Rs.	600	400	250



Direct Wages Rs.	4,29,000	1,01,250	52,800
Direct Expenses Rs.	69,000	88,350	13,450
Loss of Tonne due to Processing	4%	5%	2.5%
Proportion of Production transferred To Workshop B at Cost	20%		
To Workshop C at Cost		50%	
Proportion of Production transferred To Wholesale Warehouse	80%	50%	100%
Wholesale Warehouse: Stock on 01-01-2013	12,500	10,000	20,000
Stock on 31-12-2013 in tonne	10	20	-

Sale were Rs.20,00,000, Salaries Rs.2,00,000 and Administrative Expenses Rs.1,00,000. Prepare the respective Workshop Accounts showing the cost per tonne each workshop and an account showing the net profit of the firm for the year 2013. Closing Stock in Warehouse to be valued at the cost per ton in each workshop.

**Q.12.** The Product of a company passes through three direct processes, called respectively A, B and C. from the past experience it is ascertained that wastage incurred in each process is as under:

Process A 2%; process B 5%; Process C 20%.

The percentage of wastage is computed on the number of units entering the process concerned.

The wastage of each process possesses a scrap value.

The wastages of processes A and B is sold at Rs.50 per 100 units and that of process C at Rs.0.75 per unit.

Following information was obtained for the month of March, 2014:

20,000 units of crude materials were introduced in Process 'A' at the cost of Rs.8,000.

Particulars	Process A	Process B	Process C
Materials Consumed	4,000	1,500	1,000
Direct Labour	6,000	4,000	3,000
Manufacturing Expenses	1,800	3,500	1,000
Output in Units	19,500	21,000	15,900
Finished Product Stock:			
1 <sup>st</sup> March, 2014	2,000	3,000	5,000
31 <sup>st</sup> March, 2014	1,500	4,000	?

Stock valuation on 1<sup>st</sup> March 2014: per unit Re.1, Rs.1.50, Rs.2.00 respectively in Process A, B and C.

Stocks on 31<sup>st</sup> March are to be valued as per valuation as on 1<sup>st</sup> March, 2014. Draw process accounts A, B and C and process stock accounts of Process A, B and C.

**Q.13.** Satyug Times Ltd. submits the following information in respect of its product which passes through three consecutive processes viz. Ingestion Process, Digestion Process and Assimilation Process, for the month ended 31<sup>st</sup> January, 2014.

Particulars	Ingestion Process	Digestion Process	Assimilation Process
Quantitative Information (Kgs.)			
Basic Raw Material @ Rs. 40 per Kg.	80,000	-	-
Normal yield	80%	60%	50%
Output during the month	62,000	36,000	21,000
Stock of Process Output:			
31-12-2013	8,000	8,000	5,000
31-01-2014	10,000	4,000	4,000
Other Additional Information:			
Process Material	Rs. 3,45,000	Rs. 8,26,000	Rs. 6,17,000

Labour Man Days	2,400	1,500	1,000
Labour Rate per Man Day	Rs. 80	Rs. 100	Rs. 150
Machine Overheads	60% of Wages	50% of Process Material	Rs. 2,34,000
Other Manufacturing Overheads	Rs. 2,75,000	Rs. 1,63,000	Rs. 1,27,000
Value of Opening Stock per Kg.	Rs. 60	Rs. 140	Rs. 300
Scrap Value per Kg.	Rs. 10	Rs. 15	Rs. 20

Finished stock of assimilation process was sold at Rs. 350 per Kg.

Prepare the Process Accounts, Process Stock Account, Normal Loss Account and the Abnormal Gain/ Loss Account.

- Q.14.** M.U. Industries Ltd. is manufacturing a product which passes through three consecutive processes, F-Yarn Process, S-Yarn Process and T- Yarn Process. The following figures have been taken from their books for the year 31<sup>st</sup> March, 2014:

Particulars	F- Yarn Process	S- Yarn Process	T- Yarn Process
<b>Quantitative Details</b>			
Basic Input @ Rs. 300 per unit	9,000	-	-
Output during the year	8,000	6,000	5,000
% of Normal waste	10%	25%	15%
Process Stock – Opening	300	500	100
Process Stock – Closing	500	300	400
<b>Monetary Information</b>	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Process Materials	4,20,000	6,60,000	8,73,000
Wages	2,67,000	3,73,500	3,11,100
Manufacturing Overheads	2,40,000	2,53,500	2,41,000
Value of Opening Stock per unit	420	680	900
Scrap Value per Unit	250	300	400

Closing Stock is to be valued at respective cost of each process (as per the respective process accounts for the year ended 31<sup>st</sup> March, 2014).

You are required to prepare – (a) Process Accounts, (b) Process Stock Accounts, (c) Abnormal Loss Account and (d) Abnormal Gain Account.

- Q.15.** Reliable Yarn Ltd. manufactures a yarn product. The product passes through three consecutive processes. F.Y., S.Y. and T.Y. Relevant details for the month, 2014 are as under:

Particulars	F.Y.Process	S.Y.Process	T.Y.Process
<b>Quantitative information in Kilograms:</b>			
Basic Input Kilograms @ Rs. 10 per Kilogram	2,000	-	-
Output during the month	1,950	1,925	1,679
Stock of Process			
- On 1 <sup>st</sup> March, 2014	200	300	100
- On 31 <sup>st</sup> March, 2014	150	400	59
Percentage of Normal Loss to Input in Process	2%	5%	8%
<b>Monetary Information:</b>	<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
Process Material	9,000	2,100	2,716
Wages	9,064	1,860	4,000
Value of Opening Stock	3,880	6,720	2,800
Scrap Value per Kilogram	Re. 1	Rs. 2	Rs. 4

Closing Stock is to be valued at the respective cost of each process.

Prepare Process Accounts, Process Stock Accounts, Abnormal Loss and Abnormal Gain Account. Find out the costing profit, when the sales out of T.Y. process stock are made at Rs.40 per kilogram.



**Q.16.** Mr. Kale manufactures a product in two grades, Grade I and Grade II from common raw material. Raw Material is introduced in 'Basic Process' the produce of which is dealt with as follows:

25% Sold in open market.

25% transferred to Grade I process and the balance 50% transferred to Grade II process.

The details of processes are as follows:

Particulars	Basic Process	Grade I Process	Grade II Process
Raw materials	1000 units	-	-
Cost per unit	Rs. 200	-	-
Other materials	Rs. 25,000	Rs. 50,000	Rs. 30,000
Labour	Rs. 60,000	Rs. 50,000	Rs. 50,000
Manufacturing O. Hs	Rs. 70,000	Rs. 60,000	Rs. 60,000
Sale price per unit	Rs. 400	Rs. 1,400	Rs. 900

Prepare process accounts and determine total profit earned by Mr. Kale assuming that there is no stock in any process.

**Q.17.** Tea Estate Ltd. manufactures flavoured Tea which passes through three processes. The following particulars are available for the year ended 30-06-2014:

Particulars	Process		
	I	II	III
Raw Materials (Kg.)	10,000	4,600	1,500
Cost of Raw materials (Per Kg Rs.)	5	6	8
Direct Wages (Rs.)	24,000	18,000	12,250
Direct Expenses (Rs.)	15,200	10,736	8,590
Factory Expenses (Rs.)	20,960	6,000	4,255
Normal Loss (1%)	4%	8%	5%
Weight Loss (%)	6%	2%	NIL
Scrap Value per Kg. (Rs.)	1.80	2.50	4
Output Transferred to next Process	60%	50%	NIL
Output Sold	40%	50%	80%
Selling Price to Output Per Kg.	14	16	17
Transferred to Finished Stock	NIL	NIL	20%

% of Normal Loss and % of Weight Loss are based on total input in the process.

Prepare Process Account and Profit and Loss Account.

**Q.18.** M/s. Sagar Enterprises Ltd. Provides you the following data for the month of January, 2014, about processes D, C and H:

Particulars	Process D	Process C	Process H
Basic Raw Materials Introduced (Units)	18,000	3,1556	3,450
Cost of basic raw materials per unit (Rs.)	5.00	6.00	7.00
Labour Charges (Rs.)	52,000	36,000	30,000
Factory Overhead (Rs.)	30,440	14,874	15,660
Normal Loss (% on Total number of units input)			
Scrap Value per unit (Rs.)	6%	5%	4%
Output sold at the end of process (%)	3.00	4.00	5.00
Output Transferred to next process (%)	30%	40%	100%
Selling price per unit of the output sold at the end of Process (Rs.)	70%	60%	-
	13.50	17.50	18.50

Other common expenses not chargeable to process Accounts:

Office and Administrative overheads Rs. 36,000

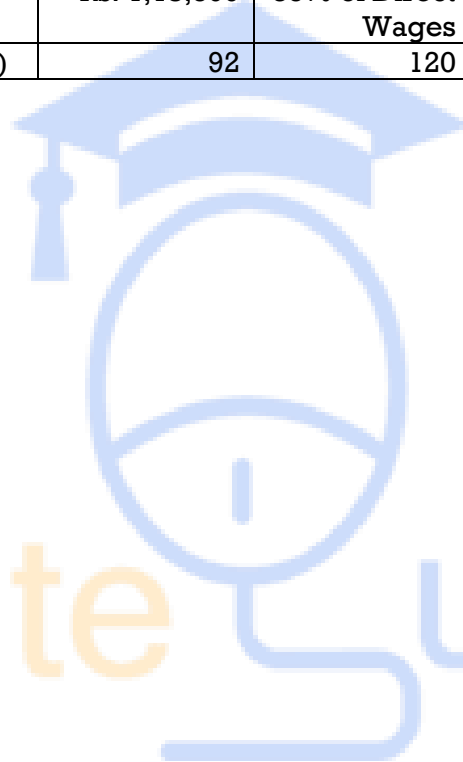
Selling and Distribution overheads Rs. 23,636

You are required to prepare process D, C and H Accounts indicating clearly profit or loss in each process and Costing Profit and Loss Account.

**Q.19.** Jai Ltd. provides you the following information about their processes for the year ended 31<sup>st</sup> March, 2014.

<b>Particulars</b>	<b>Process – A</b>	<b>Process – B</b>	<b>Process – C</b>
No. of Units introduced	15,000	4,600	4,000
Rate per Unit of Units introduced (Rs.)	40	48	55
Output during the year (Units)	14,000	12,000	8,800
Output transferred to next process (%)	60%	50%	-
Output sold at End of the process (%)	40%	50%	80%
Output transferred to Finished Stock (%)	-	-	20%
Normal Loss (% of units introduced in each process)	5%	8%	10%
Scrap Value per unit (Rs.)	15	35	55
Direct Wages (Rs.)	3,60,000	3,20,000	2,87,000
Direct Expenses	40% of Direct Wages	Rs. 1,28,720	50% of Direct Wages
Factory Overheads	Rs. 1,18,500	35% of Direct Wages	Rs. 94,500
Selling Price per units of output sold (Rs.)	92	120	165

Prepare Process Account.



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# CONTRACT COSTING

- Q.1.** On 31<sup>st</sup> October, 2013, A undertook a Contract No. 786 for Rs.2,00,000. The following information is available in respect of this contract for the accounting year ended 31<sup>st</sup> December 2013.

Particulars	Rs.
Work Certified	40,000
Wages Paid	15,000
Materials Supplied	20,000
Other Expenses	3,000
Plant Supplied on 1-10-2013	20,000
Uncertified work	1,000
Materials unused lying at site	800
Wages due but not paid	600

Provide 10% depreciation on plant.

Prepare Contract Account in the books of A.

- Q.2.** The following is the summary of the entries in a contract Ledger as on 31<sup>st</sup> December, 2013 in respect of Contract No. 51:

Particulars	Rs.
Materials (Direct)	60,000
Material (from stores)	13,000
Wages	34,600
Direct Expenses	13,400
Establishment charges	16,000
Plant	68,400
Sale of Scrap	3,640
Sub- contract Cost	14,400

You are given the following information:

- (1) Accruals on 31-12-2013 are: Wages Rs.1,600 and Direct Expenses Rs.2,200.
- (2) Depreciation on plant upto 31-12-2013 is Rs.17,100.
- (3) Included in the above summary of abstract are wages Rs.2,000 and other Expenses Rs.3,000 since certification. The value of the material used since certification is Rs.4,160.
- (4) Materials on site on 31-12-2013 cost Rs.20,000
- (5) Work certified was Rs.1,25,000.

Prepare Contract Account No. 51 and show that profit or loss should be taken into account for the year ended 31<sup>st</sup> December 2013.

- Q.3.** The Jai Hind Construction Company undertook the construction of a building at a contract price of Rs.2,00,00,000.

The date of commencement of contract was 1<sup>st</sup> May 2013.

The following cost information is given for the period ended 31<sup>st</sup> March 2014:

1. Direct Materials sent to the site – 5,000 tons @ Rs.1.50 per Kg.
2. Indirect Materials Rs.6,50,000
3. Direct Labour – 12,000 Mandays @ Rs.180 per manday.
4. Indirect Labour Charged at 7.5% of Direct labour.
5. Sub contract charges charged at 15% of indirect Materials.
6. Direct Materials Returned to stores 20 tons.
7. Direct Material Lost in an accident 5 tons.
8. Supervision charges paid Rs.8,000 per month.
9. Administrative overheads incurred Rs.12,000 per month.
10. Architect Fees charged at 2% of Work Certified.

11. Plant and Machinery installed at site on the date of commencement of contract at a cost of Rs.15,00,000. Which is to be depreciated @ 12% p.a. under original cost method.
  12. Cash received from contractee Rs.1,26,00,000 which is equal to 90% of Work Certified.
  13. Direct Material at site as on 31<sup>st</sup> March 2014 – 15 tons.
  14. Cost of work done but not certified was Rs.2,04,500 on 31<sup>st</sup> March 2014.
- You are required to prepare a Contract Account for the period ended 31<sup>st</sup> March, 2014 in the books of Jai Hind Construction Company and show what profit or loss should be taken into account for the period ended 31<sup>st</sup> March, 2014.

- Q.4.** Amla Construction Ltd. entered into a contract to construct a bungalow. The contract value is Rs.19,50,000 to be realized in installment on the basis of the value of work certified by the architect subject to a retention of 10%. The work commenced on 1-4-2013 but it remained incomplete on 31-12-2013. The facts and figures of the contract are:

	<b>Rs.</b>
Plant charged to contract at the commencement	96,000
Material charged to contract	5,40,000
Wages Paid	2,61,000
Expenses incurred on the contract	1,16,250
Total establishment expenses amounted to Rs.1,23,000 out of which 25% is attributable to this contract. Out of materials issued to the contract, material costing Rs.12,000 was sold for Rs.15,000. A part of the plant costing Rs.6,000 was damaged on 1-10-2013 and the scrap realized Rs.900 only. Plant costing Rs.9,000 was transferred to another contract site on 31-12-2013. Plant is to depreciated @ 10% p.a.	
Materials in hand on 31-12-2013	Rs.52,500
Cash received from contractee	Rs.9,18,000
Cost of Work yet to be certified	Rs.90,000
Prepare contract account showing therein the amount of profit or loss to be transferred to profit and loss account.	

- Q.5.** Mohan Construction Pvt. Ltd. obtained two contracts viz Angel and Paradise. Contract Angel commenced on 1<sup>st</sup> October, 2010 and Contract Paradise started on 1<sup>st</sup> December, 2010. Following information was extracted from their books for the period ended 31<sup>st</sup> March, 2011.

Particulars	Contract Angel Rs.	Contract Paradise Rs.
Contract Price	70,00,000	60,00,000
Cash Received	14,00,000	7,65,000
Plant issued at commencement	22,50,000	12,00,000
Work Certified	17,50,000	9,00,000
Work Uncertified	52,000	28,000
Direct Wages	2,95,000	1,77,500
Direct Expenses	1,36,500	88,700
Supervision Charges	27,500	22,500
Administrative Overheads	2,72,500	1,47,500
Sub-Contract Charges	63,700	44,200
Electricity Charges	48,800	26,600
Architect Fees	52,000	27,000
Indirect Materials	1,47,000	89,800
Direct Materials	3,58,000	1,97,200
Direct Material Returned to stores	14,000	12,000
Direct Materials at site at the end of period	73,000	42,000

**Other Information:**

- (1) On 15<sup>th</sup> December, 2010 Direct Material costing Rs. 22,000 have been transferred to contract Paradise from Contract Angel.

(2) On 21<sup>st</sup> February, 2011 Indirect Material Costing Rs. 15,000 have been transferred from contract Paradise to contract Angel.

(3) Provide depreciation @ 20% p.a. on the original cost of plant.

You are required to prepare Contract Angel A/c and Contract Paradise A/c. for the period ended 31-3-2011.

- Q.6.** M/s. Jadhav Constructions undertook contract for Rs. 5,00,00,000. On 1<sup>st</sup> August,2008. The contract was completed on 31<sup>st</sup> March, 2010. The Contractor closes his accounts on 31<sup>st</sup> March. The details of the contract are as follows:

Particulars	For the period ended 31-03-2009 (Rs.)	For the year ended 31-03-2010 (Rs.)
Material Issued	95,48,500	1,17,65,000
Direct Labour	31,37,800	45,40,000
Subcontract charges	7,88,900	28,13,000
Administrative Overheads	15,85,400	31,42,000
Supervision Charges	3,45,600	8,05,500
Material Returned to Stores	1,32,400	2,44,300
Work Uncertified	5,23,200	-
Work Certified (cumulative)	2,00,00,000	5,00,00,000
Material at site	1,00,600	-
Cash Received	1,80,00,000	3,20,00,000
Architect Fees	4% of Work Certified	4% of Work Certified

The Plant and Machinery purchased on 01/08/2008 for the contract was Rs.84,25,000 and the estimated scrap value of the Plant and Machinery at the end of the contract was Rs.4,25,000. It realized on completion of contract at its estimated scrap value.

You are required to prepare:

- (a) Contract A/c for the period ended 31-3-2009 and  
(b) Contract A/c the year ended 31-3-2010.

- Q.7.** Rohan Construction Pvt. Ltd. obtained two contracts viz., Contract 'X' and Contract 'Y'. Contract 'X' commenced on 1<sup>st</sup> April, 2013 and Contract 'Y' started on 1<sup>st</sup> June, 2013, following information extracted from their books for the year ended 31<sup>st</sup> March, 2014.

Particulars	Contract 'X' (Rs.)	Contract 'Y' (Rs.)
Materials Issued	4,45,000	4,95,000
Direct Wages	2,74,000	3,23,500
Direct Expenses	1,23,300	94,750
Sub. Contract Charges	73,350	45,750
Architect Fees	24,000	35,000
Administrative Overheads	3,24,750	3,74,800
Electric Services and Fittings	15,270	18,380
Plant Issued at Commencement	5,00,000	6,00,000
Contract Price	25,00,000	30,00,000
Work Certified	13,00,000	18,00,000
Work Uncertified	30,000	75,000
Cash Received	10,40,000	16,20,000
Accrued wages as on 31 <sup>st</sup> March, 2009	15,000	18,000
Materials at site	40,000	70,000
Materials returned to store	3,000	10,000

On 20<sup>th</sup> October, 2013, Materials costing Rs.5,330 have been transferred to Contract 'X' from Contract 'Y'. Provide Depreciation @ 25% p.a. on original cost of plant.

You are required to prepare both Contract Accounts for the year ended 31<sup>st</sup> March, 2014.

- Q.8.** Raj Construction company has undertaken three contracts during the year and the following particulars are available as on 31-12-2014.

Particulars	Contract M Rs.	Contract N Rs.	Contract O Rs.
Contract Price	10,00,000	25,00,000	7,50,000
Material issued to contract	1,65,000	2,24,000	1,89,000
Labour	1,02,800	1,26,500	1,75,000
Sub – contract charges	72,800	65,900	28,500
Supervision charges	12,000	18,000	15,000
Architect fees	10,000	15,000	25,000
Insurance charges	3,000	6,100	7,400
Work Certified	4,00,000	5,00,000	5,00,000
Work Uncertified	35,000	40,000	25,000
Amount received from contractee	3,20,000	4,50,000	3,75,000
Closing Stock of Material	9,000	10,000	20,000

All contracts were commenced during the current year. Total Depreciation on plants amounted to Rs. 11,200 and allocate the same to all contracts in the ratio of work certified. Prepare Contract Accounts. Show the calculation of Profit transferred to Profit and Loss Account.

- Q.9.** Navnirman Ltd. has undertaken three contracts. It furnishes the following information for the year ended 31<sup>st</sup> March, 2014:

Particulars	Mumbai Contract (Rs.)	Pune Contract (Rs.)	Nashik Contract (Rs.)
1. Balances on 1 <sup>st</sup> April, 2013			
Material at site	100	2,000	-
Uncertified work	2,500	4,000	-
Plant at site	2,200	3,100	-
Work Certified	19,500	1,400	-
Provision for Contingencies	1,000	600	
2. Transactions during the year			
Material issued	-	6,200	8,000
Subcontract charges	600	11,800	9,000
3. Balances on 31 <sup>st</sup> March, 2014			
Material at site	-	1,000	800
Uncertified work	-	1,000	3,850
Plant at site	-	2,000	950
Work Certified	25,000	30,000	12,000
4. Contract price	25,000	40,000	50,000
5. Amount Received	25,000	27,000	10,800

6. Value of Plant transferred from Mumbai contract to Nashik contract Rs. 1,550. The company consistently adopts to policy of taking credit for the contract profit considering the proportion of amounts received to the contract price.

**You are required to:**

- Prepare the respective contract accounts for the year ended 31<sup>st</sup> March, 2014.
  - Find the net profit as per Profit and Loss Account.
- Q.10.** Amit Ltd. obtained two contracts viz. Nagpur and Aurangabad. Contract Nagpur commenced on 1<sup>st</sup> October 2014 and Contract Aurangabad started on 1<sup>st</sup> December 2014. Following information was extracted from their books for the year ended 31<sup>st</sup> March 2015.

Particulars	Contract Nagpur (Rs.)	Contract Aurangabad (Rs.)
Contract Price	70,00,000	15,00,000
Cash Received	11,20,000	7,65,000



Plant issued at commencement	22,50,000	12,00,000
Work Certified	14,00,000	9,00,000
Work Uncertified	52,000	28,000
Direct Wages	2,95,000	1,75,500
Direct Expenses	1,36,500	30,700
Supervision Charges	27,500	22,500
Administrative Overheads	2,72,500	1,47,500
Sub-Contract Charges	63,700	-
Electricity Charges	48,800	-
Architect's Fees	52,000	27,000
Indirect Materials	1,47,000	1,62,000
Direct Materials	3,58,000	1,99,200
Direct Materials returned to Stores	14,000	-
Direct Materials at the site at the end of the period	73,000	54,000

Provide depreciation @ 20% p.a. on the original cost of Plant.

Prepare Contract A and Contract B Account for the period ended 31<sup>st</sup> March 2015.

- Q.11.** Mahendra contractors undertook a contract for Rs. 15,00,000 on 1<sup>st</sup> July, 2012. The contract was completed on 31<sup>st</sup> March, 2014. The contractor prepares his accounts on 31<sup>st</sup> March. The details of the contract are:

Particulars	Period From	
	1-7-12 to 31-3-13 (Rs.)	1-4-13 to 31-3-14 (Rs.)
Material issued	1,52,000	3,30,000
Direct Wages	1,25,000	4,65,000
Direct Expenses	30,000	45,000
Materials returned to stores	22,000	15,000
Materials at site	20,000	8,000
Uncertified work	48,000	-
Office overheads	23,000	66,000
Material lost by fire	-	5,000
Work certified	3,00,000	15,00,000
Plant issued	3,00,000	1,50,000

Provide depreciation @ 20% p.a. on plant. Prepare Contract Accounts for the years ended 31-3-2013 and 31-3-2014.

- Q.12.** Skyline Flyover Construction Ltd., has received a contract for construction of a flyover for a contract price of Rs.820 lacs. The contractee has agreed to pay 90% of the Work Certified. The Company has decided not to book any Profit to the P & L Account until 25% of the total work is completed and thereafter in that ratio which the amount received bears to the total contract price. The entire amount was received by 31-3-2014.

Skyline Flyover Constructions Ltd. has commenced their project work on 1<sup>st</sup> August, 2012 and completed the work by 31<sup>st</sup> January, 2014. The value of plant and Machinery bought for the contract was Rs.57 lacs and the estimated scrap value of the machinery at the end of the contract was Rs.12 lacs. The accounts are maintained on financial year ending 31<sup>st</sup> March and the details are as under:

Particulars	2012-2013 (Rs.)	2013-2014 (Rs.)
Materials	2,28,00,400	26,01,000
Wages	1,09,27,800	38,10,000
Direct Expenses	92,85,400	19,44,000
Indirect Expenses	87,88,400	11,05,000
Supervision Charges (monthly)	40,000 (p.m.)	30,000 (p.m.)
Administration Overheads (monthly)	82,500 (p.m.)	40,000 (p.m.)
Architect Fees	5% of work certified	5% of work certified

RCC Consultant Fees	3% of work certified	3% of work certified
Work uncertified at the year end	11,35,000	-
Materials at site at the year end	3,37,000	-
Amount received during the year	5,90,40,000	2,29,60,000

You are required to prepare Contract Accounts for the years ended 31<sup>st</sup> March, 2013 and 31<sup>st</sup> March, 2014 and compute Profit/Loss from the contract.

**Q.13.** Bharat Construction Ltd., obtained the contract to construct a Residential Complex for Rs.300 lakh. The Contractee agrees to pay 90% of the work certified immediately upon the receipt of the certificate from the Architect and the balance amount would be paid on the completion of the contract.

The work was commenced on 1<sup>st</sup> August, 2010 and completed on 31<sup>st</sup> March, 2012. A machine costing Rs.30,00,000 was specially bought for use on contract and it would fetch Rs.3,00,000 as scrap value on completion of the contract. The accounts are closed on 31<sup>st</sup> March, every year. Further details are as follows:

Particulars	31-03-2011	31-03-2012
	Rs.	Rs.
<b>Monetary Information:</b>		
Wages	10,50,000	19,80,000
Indirect Materials	18,30,000	31,40,000
Direct Materials	3,95,000	6,80,000
Office Expenses	5,79,000	8,64,000
Price per ton of steel	42,000	44,000
Price per Brick	8	9
Scrapped Value of Bricks	-	32,000
Work Certified (Cumulative)	1,20,00,000	3,00,00,000
Work Uncertified	5,00,000	-
<b>Quantitative Information:</b>		
<b>Steel:</b> Purchased (Ton)	105	120
Returned (Ton)	4	3
Loss in Accident (Ton)	-	5
Sold (Ton)	-	3
<b>Bricks:</b> Purchased (Nos.)	1,20,000	1,50,000
Returned (Nos.)	3,000	2,000
Lost in Accident (Nos.)	1,500	-

Prepare Contract Accounts for the year ended 31-03-2011 and 31-03-2012.

**Q.14.** The following information relates to a contract for Rs.2,00,00,000 and for which 80% of the value in progress as certified by the architect was paid by the contractee.

Particulars	I <sup>st</sup> Year Rs.	II <sup>nd</sup> Year Rs.	III <sup>rd</sup> Year Rs.
Materials Issued	9,20,000	18,80,000	29,00,000
Direct Wages	14,00,000	27,00,000	19,00,000
Direct Expenses	1,00,000	1,90,000	2,20,000
Indirect Expenses	20,000	40,000	50,000
Work Certified (Cumulative)	45,00,000	1,50,00,000	2,00,00,000
Uncertified Work	1,00,000	1,00,000	-
Plant Issued	1,50,000	-	-
Material on site at year end	50,000	70,000	1,00,000
Architect's Fees	4% of work certified	4% of work certified	4% of work certified



The value of Plant at the end of I<sup>st</sup> Year, II<sup>nd</sup> Year and III<sup>rd</sup> Year was Rs.1,20,000, Rs.90,000 and Rs.75,000 respectively. Prepare contract Accounts for these three years and show the calculation of profit transferred of Profit and Loss Account.

- Q.15.** Prepare the Contract Accounts and Contractee's Accounts from the following information relating to a contract for Rs.60,00,000, the contractee paying 80% of the value of work done as certified by the architect and the balance on completion.

<b>Particulars</b>	<b>2014 – 15 Rs.</b>	<b>2015 – 16 Rs.</b>	<b>2016 – 17 Rs.</b>
Material issued	7,20,000	8,80,000	5,04,000
Direct wages	6,24,000	7,95,200	6,20,800
Direct expenses	28,000	1,00,000	36,000
Indirect expenses	12,000	16,000	Nil
Work certified (Cumulative)	14,00,000	45,20,000	60,00,000
Architect fees	4% of work certified	4% of work certified	4% of work certified
Work done but yet to be certified	Nil	80,000	Nil
Plant at commencement (Rs.)	80,000	Nil	Nil
Plant at the end of the year (Rs.)	64,000	40,000	16,000

- Q.16.** Following details are related to Contract 'P' for the year ended 31<sup>st</sup> March, 2014.

<b>Particulars</b>	<b>Rs.</b>
Material Issued	8,00,000
Material at Site	50,000
Plant Issued	4,50,000
Depreciation on Plant	90,000
Work Certified	?
Work Uncertified	30,000
Reserves	1,40,000
Cash Received (80% of the Work Certified)	14,40,000
Outstanding Expenses	16,000
Direct Wages Paid	2,30,000

You are required to show the relevant items in the Balance Sheet in respect of above contract as on 31<sup>st</sup> March, 2014.

- Q.17.** JP Constructors Pvt. Ltd. provides you the following information:
- The project commenced on 1<sup>st</sup> September 2013 and it was estimated to be completed by 31<sup>st</sup> March, 2015.
  - The Contract price was negotiated at Rs.680 lacs.
  - The actual expenditure upto 31<sup>st</sup> March, 2014 and subsequent additional estimated expenditure upto 31<sup>st</sup> March, 2015 is furnished as under:

<b>Particulars</b>	<b>Actual Expenditure during 1-9-2013 upto 31-3-2014 (Rs.)</b>	<b>Estimated Additional Expenditure during 1-4-2014 to 31-3-2015 (Rs.)</b>
Direct Materials	1,95,60,000	1,27,40,000
Indirect Materials	14,23,000	11,77,000
Direct Wages	42,46,500	41,33,500
Supervision Charges	4,14,400	5,55,600
Architect Fees	8,17,500	12,82,500
Construction Overheads	31,52,600	21,47,400
Administrative Overheads	14,16,000	24,34,000
Closing Materials at site	7,50,000	-

Work Uncertified at the end of the year	13,80,000	-
Work Certified during the year	3,50,00,000	3,30,00,000

The value of Plant and Machinery sent to site was Rs. 60 lacs, whereas the scrap value of the plant and Machinery at the end of the project was estimated to be Rs.3 lacs.

It was decided that the profit to be taken credit for should be that proportion of the estimated net profit to be realized on completion of the project which the certified value of work as 31-3-2014 bears to the total contract price. You are required to prepare Contract Account for the period ended 31<sup>st</sup> March, 2014 along with the working of profit to be taken credit for.

- Q.18.** M/s. Narendra Constructions obtained a contract to build a Fly-over Bridge at a contract price of Rs. 150 lacs. The Contractee agrees to pay 90% of value of the work done as certified by the architect immediately on receipt of the certificate and to pay the balance on completion of the contract. The Contactor commenced the work on 1<sup>st</sup> May 2013 and it is estimated to be completed by 31<sup>st</sup> December, 2014. The actual expenditure upto 31<sup>st</sup> March, 2014 and subsequent estimated expenditure upto 31<sup>st</sup> December, 2014 is furnished below.

Particulars	Actual Expenditure Upto 31-03-2014 Rs.	Estimated Expenditure from 1-4-2014 to 31-12-2014 Rs.
Direct Materials	33,50,000	28,00,000
Indirect Materials	5,60,000	7,00,000
Direct Wages	8,42,000	7,95,000
Sub-Contract Charges	98,000	52,000
Architect Fees	1,84,000	2,84,000
Administrative Overheads	6,50,000	4,50,000
Special Equipment Charges	4,86,000	2,54,000
Supervision Charges	10,000 p.m.	12,000 p.m.
Establishment Charges	8,000 p.m.	9,000 p.m.
<b>Other details:</b>	<b>Actual (Rs.)</b>	<b>Estimated (Rs.)</b>
Cash Received	67,50,000	82,50,000
Closing Materials at site	4,10,000	-
Uncertified work	1,80,000	-
Certified Work (Cumulative)	75,00,000	1,50,00,000

A special Machinery Costing Rs.13,40,000 was bought for the contract and the estimated scrap value of the machinery at the end of the contract would be Rs.1,40,000. It is decided that the profit to be taken credit for should be that proportion of the estimated net profit to be realized on completion of the contract which the certified values of work as on 31<sup>st</sup> March, 2014 bears to the total contract price. Maintain 2% provision for contingencies on total cost of contract (excluding such provision for contingencies).

You are required to prepare the Contract Account for the period ending 31<sup>st</sup> March, 2014 and show your calculation of the Profit to be credited to the Profit and Loss Account for the period ended 31<sup>st</sup> March, 2014.

- Q.19.** Marvel Infrastructures Ltd. commenced a contract on 1<sup>st</sup> April, 2009. The Total Contract Price was for Rs.17,50,000 and it is likely to be completed on 31<sup>st</sup> December, 2010. The Actual Expenditure upto 31<sup>st</sup> March, 2010 and subsequent estimated expenditure upto 31<sup>st</sup> December, 2010 are given below:

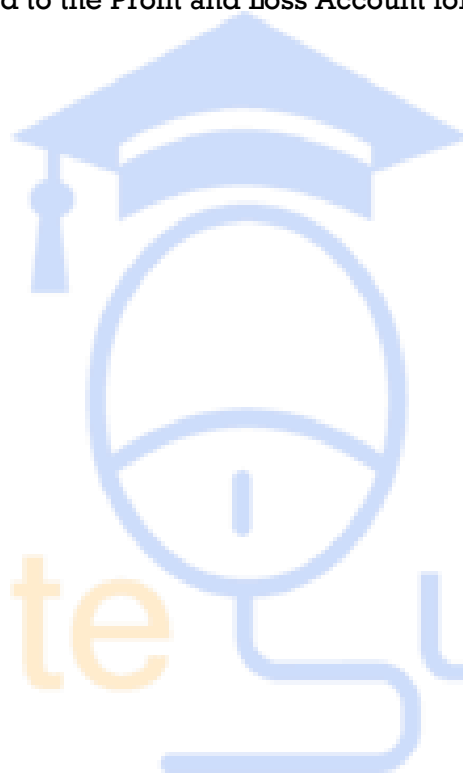
Particulars	Actual Expenditure upto 31-3-2010 (Rs.)	Estimated Expenditure from 1-4-2010 to 31-12- 2010 (Rs.)
Material Issued	4,80,000	3,14,500
Direct Labour	2,20,000	1,60,000
Sub-Contract Charges	10,000	15,000

Chargeable Expenses	60,000	85,000
Plant Purchased	1,50,000	-
Plant Returned to stores at the end of the period (Original Cost)	50,000	1,00,000
Architect fees	20,000	34,000
Material at Site	20,000	-
Work Certified (Cumulative)	10,00,000	17,50,000
Work Uncertified	25,000	-
Cash Received	8,00,000	9,50,000

The Plant is subject to annual depreciation @ 20% p.a. on Original Cost. That the Rs.9,000 would be sufficient to meet contingencies.

It was decided that the profit to be taken credit for should be that portion of the estimated net profit to be realized on completion of the contract which the certified values of work as on 31<sup>st</sup> March, 2014, bears to the Total Contract Price.

You are required to prepare Contract Account for the year ended 31<sup>st</sup> March, 2014 and show your calculation of the Profit to be credited to the Profit and Loss Account for the year ended 31<sup>st</sup> March, 2014.



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# MARGINAL COSTING

**Q.1.** Calculate break-even point in units and in value when variable cost per unit Rs.2 total fixed costs are Rs.40,000 and selling price per unit is Rs.3.

**Q.2.** From the following data, compute break-even sales and margin of safety:

	<b>Rs.</b>
Sales	10,00,000
Fixed Cost	3,00,000
Profit	2,00,000

**Q.3.** Given the following, find the margin of safety sales:

- (i) Profit earned Rs.24,000.
- (ii) Selling price per unit Rs.10
- (iii) Marginal cost per unit Rs.7

**Q.4.** A company has fixed expenses of Rs.90,000 with sales at Rs.3,00,000 and profit of Rs.60,000. Calculate the Profit Volume Ratio, if, in the next period, the company suffered a loss of Rs.30,000, Calculate the Sales Volume.

**Q.5.** From the following data, calculate break-even point (BEP).

	<b>Rs.</b>
Selling price per unit	20
Variable cost per unit	15
Fixed overheads	20,000

If sales are 20% above BEP, determine the net profit.

**Q.6.** (i) Find out contribution and BEP sales if Budgeted Output is 80,000 units. Fixed Cost is Rs. 4,00,000. Selling Price per unit is Rs. 20. Variable Cost per unit is Rs. 10.  
(ii) Find out Margin of safety, if profit is Rs. 20,000 and PV Ratio is 40%.

**Q.7.** From the following data, calculate:

- (i) Break-even point expressed in amount of sales in rupees.
- (ii) Number of units that must be sold to earn a profit of Rs. 1,60,000 per year.

Selling price	Rs. 20 per unit
Variable manufacturing cost	Rs. 11 per unit
Variable selling cost	Rs. 3 per unit
Fixed factory overheads	Rs. 5,40,000 per year
Fixed selling cost	Rs. 2,52,000 per year

**Q.8.** Sales Rs.1,00,000, Profit Rs.10,000, Variable Cost 70%. Find out (a) PV ratio (b) Fixed Cost and (c) Sales to earn a profit of Rs.40,000.

**Q.9.** ABC Ltd. furnishes you the following information relating to the half year ending 30<sup>th</sup> Nov. 2014.

<b>Particulars</b>	<b>Rs.</b>
Fixed expenses	50,000
Sales value	2,00,000
Profit	50,000

During the second half of the same year the company, has projected a loss of Rs.10,000. Calculate-

- (i) The P/V Ratio, break-even point and margin of safety for six months ending 30<sup>th</sup> Nov., 2014.
- (ii) Expected sales volume for second half of the year assuming that selling price and fixed expenses remain unchanged in the second half year also.
- (iii) The break-even point and margin of safety for the whole year 2014-2015.

**Q.10.** A company sells its product at Rs. 15 per unit. In a period if it produces and sells 8,000 units, it incurs a loss of Rs.5 per unit. If the volume is raised to 20,000 units it earns a profit of Rs.4 per unit. Calculate break-even point both in terms of rupees as well as in units.

**Q.11.** Following information is available in respect of P Ltd. and V Ltd.:

Particulars	P Ltd. (Rs.)	V Ltd. (Rs.)
Sales	11,00,000	14,00,000
Variable Cost	8,80,000	10,50,000
Profit	1,20,000	2,00,000

**Calculate:**

- (i) P/V Ratio of both companies
- (ii) Fixed Cost of both companies
- (iii) Break Even Point of both companies
- (iv) Sales to earn profit of Rs.2,10,000 by each company
- (v) Margin of Safety of 'V' Ltd.

**Q.12.** The following data have been extracted from the books of ABC Ltd.

Particulars	Sales (Rs.)	Profit (Rs.)
2012	5,00,000	50,000
2013	7,50,000	1,00,000

**Q.13.** The sales turnover and profit of M/s Arpit Ltd. during the two year 2011 and 2012 were as follows:

Year	Sales	Profit
2010	9,00,000	1,20,000
2011	10,20,000	1,50,000

You are required to calculate (i) P.V. Ratio, (ii) BEP Sales, (iii) Sales required to earn a profit of Rs.2,40,000, (iv) The profit made when sales are Rs.15,00,000

**Q.14.** From the following particulars, you are required to calculate:

- (a) Fixed Cost,
- (b) P. V. Ratio,
- (c) Break Even Sales
- (d) Sales to earn profit of Rs.6,00,000,
- (e) Margin of Safety of the year 2015.

Particulars	2015 (Rs.)	2016 (Rs.)
Total Cost	12,96,000	18,72,000
Sales	14,40,000	21,60,000

**Q.15.** M/s. EYE Enterprises furnishes the following transaction:

Year	Sales	Total Cost
2015	6,00,000	5,40,000
2016	8,00,000	7,00,000

From the above calculate the following:

- (a) P.V. Ratio, (b) Fixed Cost, (c) Breakeven Cost, (d) Sales to earn Profit Rs.2,00,000,
- (e) MOS of 2016.

**Q.16.** Following figures have been extracted from the books of M/s. EFG Private Limited.

<b>Financial Year</b>	<b>Sales (Rs.)</b>	<b>Profit/Loss (Rs.)</b>
2011 – 12	4,00,000	15,000 (Loss)
2012 – 13	5,00,000	15,000 (Profit)

You are required to calculate:

1. Profit Volume Ratio
2. Fixed Costs
3. Break Even Point
4. Sales required to earn a profit of Rs.45,000
5. Margin of Safety in financial year 2012 – 13.

**Q.17.** The following information is available from records of a company as at 31<sup>st</sup> March, 2010 and 2011.

<b>Particulars</b>	<b>2010 (Rs. in lakhs)</b>	<b>2011 (Rs. in lakhs)</b>
Sales	1,500	2,000
Profit	300	500

**Calculate:**

- (i) P/V Ratio
- (ii) Fixed Cost
- (iii) Break Even Sales in Rs.
- (iv) Sales required to earn profit of Rs.1,000 lakhs
- (v) Profit for Sales of Rs.2,000 lakhs
- (vi) Margin of Safety when Sales is Rs.1,000 lakhs

**Q.18.** The AB Ltd. furnish the following information

	<b>1<sup>st</sup> Period</b>	<b>2<sup>nd</sup> Period</b>
Sales	20,00,000	30,00,000
Profit	2,00,000	4,00,000

From the above, calculate the following:

- (i) P/V Ratio
- (ii) Fixed Expenses
- (iii) BEP
- (iv) Sales to earn Rs.5,00,000
- (v) Profit when sales are Rs.15,00,000

**Q.19.** SD and Co. has prepared the following budget estimates for the year 2000-2001: Sales 15,000 units, Sales Value Rs.1,50,000, Fixed Expenses Rs.34,000, Variable Cost per unit Rs.6.

**You are required to find:**

- (i) P.V. Ratio, (ii) Break Even point, (iii) Margin of Safety.

Also calculate revised profit volume ratio, Break-even point and margin of safety, if selling price per unit is reduced by 10%

**Q.20.** The following information is obtained from a Company for February:

Sales	Rs. 20,000
Variable Costs	Rs. 10,000
Fixed Costs	Rs. 6,000

(a) Find P/V Ratio, Break-even Point and Margin of Safety at this level, and the effect of:

- (1) 20% decrease in fixed costs; (2) 10% increase in fixed costs; (3) 10% decreased in variable costs; (4) 10% increase in selling price; (5) 10% increase in selling price together with an increase of fixed overheads by Rs. 1,200; (6) 10% decrease in sales price; (7) 10% decrease in sales price accompanied by 10% decrease in variable costs.

**Q.21.** You are given the following information for the next year

Particulars	Rs.
Sales (10,000 units)	1,20,000
Variable Cost	48,000
Fixed Cost	60,000

- (1) Find out the P. V. Ratio, Break-even point and the margin of safety.
- (2) Evaluate the effect of following on P.V. Ratio, Break-even Point and the margin of safety.
  - (a) 10% increase in Variable Cost
  - (b) 10% decrease in Variable Cost
  - (c) 10% increase in Fixed Cost
  - (d) 10% decrease in Fixed Cost
  - (e) 10% increase in Physical Sales Volume
  - (f) 10% decrease in Physical Sales Volume
  - (g) 5% increase in Selling Price
  - (h) 5% decrease in Selling Price
  - (i) 10% increase in Selling Price and 10% decrease in Physical Sales Volume.
  - (j) 5% decrease in Selling Price and 10% increase in Physical Sales Volume

**Q.22.** Q Ltd. produces and sales a single article at Rs. 10 each. The marginal cost of production is Rs. 6 each and fixed cost is Rs. 400 per annum.

**Calculate:**

- (i) P.V. Ratio, (ii) The break even sales (in Rs. and No.), (iii) The sales to earn a profit of Rs.500, (iv) Profit at sales of Rs.3,000, (v) New breakeven point if sales price is reduced by 10%, (vi) Margin of safety at sales of Rs.1,500 and (vii) Selling price per unit if the breakeven point is reduced to 80 units.

**Q.23.** The following is the cost structure of a product. Selling price is Rs.100 per unit.

**Variable Cost:**

Material	Rs.38
Labour	Rs.14
Direct Expenses	Rs.8

**Fixed Overheads for the year:**

Factory Overheads	Rs.2,80,000
Office overheads	Rs.2,20,000
No. of units produced and sold	Rs.40,000

**Calculate:**

- (i) P.V. Ratio, (ii) Breakeven point in units, (iii) Margin of safety amount, (iv) Breakeven point if fixed overheads increased by 20%, (v) Revised P.V. Ratio when selling price increased by 20%.

**Q.24.** A company produces and sells 1,500 units of a commodity at Rs.20 each. The variable cost of production is Rs.12 per unit and fixed cost Rs.8,000 per annum.

**Calculate:**

- (i) P.V. Ratio, (ii) Sales at breakeven point, (iii) Additional sales required to earn the same amount of profit if selling price is reduced by 10%.

**Q.25.** Margin of safety is Rs.4,20,000 which is 30% of total sales and Profit Volume Ratio is 25%.

**From the above calculate:**

- (i) Total Sales, (ii) Profit on Present Sales, (iii) Fixed Cost, (iv) Sales to earn profit Rs.1,40,000.

**Q.26.** Margin of safety is Rs.8,00,000 which is 40% of total sales and Profit Volume Ratio is 30%.

**From the above calculate:**

- (i) Total Sales, (ii) Profit on Present Sales, (iii) Sales to earn profit Rs.3,00,000,(iv) Fixed Cost.



**Q.27.** The following figures relate to Sonali Ltd.

Selling price per unit	Rs. 40
Direct material per unit	Rs. 12
Direct Labour per unit	Rs. 9
Other Variable Overheads per unit	Rs. 7
Fixed Factory Overheads	Rs. 3,20,000
Fixed Office Overheads	Rs. 4,30,000

**Calculate:** (i) P.V. Ratio, (ii) Breakeven sales in units and Rs., (iii) Sales to earn profit of Rs.4,50,000, (iv) New breakeven point in Rs. and unit if fixed overheads are increased by 15%.

**Q.28.** Kamal Ltd. manufacturing tables provides the following information:

Fixed Cost Rs.50,000 for the year

Variable cost Rs.20 per table

Capacity 2,000 tables per year

Selling Price Rs.70 per table

From the above mentioned information:

- (i) Find the Break even point
- (ii) Find the number of tables to be sold to get a profit of Rs.30,000
- (iii) Find the break even point and sales if the selling price changes to Rs.60 per table.
- (iv) If the company can manufacture 600 tables more per year with an additional fixed cost of Rs.2,000, what should be the selling price to maintain profit per table as at (ii) above?

**Q.29.** A firm sells 25,000 units at a selling price of Rs.5 per unit. Its fixed cost is Rs.40,000 and variable expenses Rs.50,000. Find out the Break-even point for the firm. Also, find out BEP when:

1. The selling price is increased by 30%.
2. The fixed cost is increased by 15%.
3. The fixed cost is decreased by 25%.
4. The selling price is decreased by 20%.

**Q.30.** A company annually manufactures and sells 20,000 units of a product, the selling price of which is Rs.50 and profit earned is Rs.10 per unit.

The analysis of cost of 20,000 units is

Material Cost	Rs.3,00,000
Labour Cost	Rs.1,00,000
Overheads (50% variable)	Rs.4,00,000

**You are required to compute:**

- (i) Contribution per unit, (ii) PV Ratio, (iii) Breakeven sales in Rs., (iv) Break even sales in units, (v) Sales required to earn a profit of Rs.4,00,000, (vi) Profit when sales is 18,000 units, (vii) Margin of safety when actual sales is Rs.7,00,000.



# STANDARD COSTING

**Q.1.** From the following particulars calculate:

- (i) Material Cost Variance
- (ii) Material Price Variance
- (iii) Material Usage Variance

	<b>Standard</b>	<b>Actual</b>
<b>Material</b>	1,000 kg	900 kg
<b>Price</b>	Rs.12 per kg	Rs.16 per kg

**Q.2.** Calculate Material variances from the following:

Standard	-	For 90 kgs of Finished output.
Material	-	135 kgs @ Rs. 12 per kg.
Actual Production	-	81,000 kgs.
Materials used	-	1,24,000 kgs.
Cost of Material used	-	Rs.14,75,600

**Q.3.** From the following particulars calculate:

1. Material Cost Variance	
2. Material Price Variance	
3. Material Usage Variance	
Standard cost for 100 units	800 kgs
Standard rate per kg	Rs.6.40
Actual Production	45,000 units
Actual Material used	3,50,000 kgs
Actual Material cost	Rs.22,05,000

**Q.4.** A manufacturing concerns which has adopted standard costing furnishes the following information:

- 1. Standard Material for 70 kg, finished products, 100 kg.
- 2. Standard price of material Re. 1 per Kg.
- 3. Actual output 2,10,000 kg.
- 4. Actual material used 2,80,000 kg.
- 5. Cost of material Rs.2,52,000.

**Calculate:**

(1) Material Usage Variance. (2) Material Price Variance. (3) Material Cost variance.

**Q.5.** The Standard material cost for 200 units of output is :

Materials	Kg	Rate Per Kg.
A	50	12
B	100	9
C	100	10

The Actual cost for 8,000 units is as follows:

Materials	Kg	Total Cost
A	2100	28,350
B	3750	30,750
C	4150	46,480

Calculate material cost variance, material price variance and material usage variance.

**Q.6.** G Chemical Industries provide the following from their records. For making 10 Kgs., standard materials requirement is:

Material	Quantity (Kg)	Rate per Kg (Rs.)
A	8	6.00
B	4	4.00

During April 2002, 1,000 Kgs were produced. The actual consumption of materials is as under:

Materials	Quantity (Kg)	Rate per Kg (Rs.)
A	750	7.00
B	500	5.00

Calculate: All Material Variances.

**Q.7.** From the following information calculate:

- (i) Labour Cost Variance
- (ii) Labour Rate Variance
- (iii) Labour Efficiency Variance

	Standard	Actual
Number of hours per unit	360	400
Rate per hour (Rs.)	1.50	1.40

**Q.8.** From the following information calculate:

- (1) Labour Cost Variance
- (2) Labour Rate Variance and
- (3) Labour Efficiency Variance.

Standard Hours for 4 units	- 24 Hours
Standard Rate	- Rs. 18 per unit
Actual Production	- 1,800 units
Actual Hours	- 10,500 Hours
Actual Rate	- Rs. 3.10 per hour

**Q.9.** From the following information, calculate Labour Variances.

Standard for 10 units	5 Hours
Standard Rate per unit	Rs.15
Actual Production	1,60,000 units
Actual Hours worked	85,000 Hours
Actual Rate Per Hour	Rs.29.80

**Q.10.** The following details are available from the records of ABC Ltd. engaged in manufacturing Article 'A' for the week ended 28<sup>th</sup> September.

The standard labour hours and rates of payment per article 'A' were as follows:

	Hours	Per hour (Rs.)	Total (Rs.)
Skilled Labour	10	3.00	30
Semi-skilled Labour	8	1.50	12
Unskilled Labour	16	1.00	16
			58

The actual production was 1,000 articles 'A' for which the actual hours worked and rates are given below:

	Hours	Per hour (Rs.)	Total (Rs.)
Skilled Labour	9,000	4.00	36,000
Semi-skilled Labour	8,400	1.50	12,600
Unskilled Labour	20,000	0.90	18,000
	37,400		66,600

From the above set of data you are asked to calculate:

- (a) Labour Cost Variance
- (b) Labour Rate Variance



<b>Direct Labour :</b> 3 hours @ ₹ 2 per hour Standard Cost per unit		6 40
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The company manufactured and sold 6,000 units of the product during the year, details of direct material and labour cost being :

Particulars	₹	₹
<b>Direct Materials :</b>		
25,000 units of X @ ₹ 4.20 per unit	1,05,000	
36,000 units of Y @ ₹ 2.70 per unit	<u>97,200</u>	2,02,200
<b>Direct Labour :</b>		
17,000 hours @ ₹ 2.20 per hour		<u>37,400</u>
Total		2,39,600

Calculate following variances

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Material Cost Variance</li> <li>2. Material Usage Variance</li> <li>3. Material Price Variance</li> </ol> | <ol style="list-style-type: none"> <li>4. Labour Cost Variance</li> <li>5. Labour Efficiency Variance</li> <li>6. Labour Rate Variance</li> </ol> |
|---|---|

**Q.16.** The standard cost of the product SRK reveals :

<b>Standard Materials :</b>	₹
2 kg of A @ ₹ per kg	400
1 kg of B @ ₹ 6 per kg	600
Direct Labour (3 hours @ ₹ 6 per hour)	18.00
<b>Actual Data :</b>	₹
Direct Materials	
19,000 kg of A @ 2.20 per kg	41,800
10,000 kg of B @ 5.60 per kg	56,000
<b>Direct Labour:</b>	
(28,500 hours @ ₹ 6.40 per hour)	1,82,400
Actual production was 9,000 units.	

**Calculate:**

1. Material Price Variance
2. Material Usage Variance
3. Material Cost Variance
4. Labour Rate Variance
5. Labour Efficiency Variance

# COST CONTROL ACCOUNTS

## (NON-INTEGRATED ACCOUNTING SYSTEM)

**Q.1.** The following transactions took place during October in X Co., Ltd. Enter the transactions in the Financial and Cost Books. **Rs.**

(1) Materials purchased:	
Credit purchases	40,000
Cash purchases	38,000
Credit purchases for Job No. 20	11,000
(2) Returned to suppliers	
	1,500
(3) Direct material issued to jobs	
	54,000
(4) Indirect material issued to jobs	
	1,400
(5) Material returned from job to stores	
	1,200
(6) Material transferred from Job No. 18 to Job No. 42	
	2,300

**Q.2.** Rockman Ltd. maintains separate set of books for financial accounts and cost accounts. The following information is furnished for the year 2011.

Particulars	Rs.
Stores Ledger Control A/c	60,000
Work-in-progress Ledger Control A/c	90,000
Finished Goods Ledger Control A/c	1,40,000
General Ledger Adjustment A/c	2,90,000
Transactions for the year are:	
Materials purchased	6,60,000
Materials issued as:	
- Direct materials	4,50,000
- Indirect materials	1,20,000
Wages paid allocated as:	
- Direct cost	2,70,000
- Indirect cost	90,000
Production expenses	2,40,000
Value of finished goods produced	10,80,000
Closing stock of finished goods produced	1,20,000
Administration expense	2,40,000
Selling expenses	1,80,000
Sales	18,00,000

Pass Journal Entries & prepare the necessary control accounts in books of costing records.

**Q.3.** Outland Engineering Co's cost ledger indicates the following opening balance as on 1-1-2014:

	<b>Rs.</b>	<b>Rs.</b>
General ledger adjustment account	-	15,200
Stores ledger control account	8,700	-
Work-in-progress ledger control account	4,300	-
Finished goods ledger control account	<u>2,200</u>	<u>-</u>
	<u>15,200</u>	<u>15,200</u>

At the year end, the following information is obtained:

Purchase for stores		57,600
Purchase for special jobs		1,700
Direct wages	38,600	-
Indirect factory wages	9,500	-
Administration salaries	9,700	-
Selling and distribution salaries	<u>4,300</u>	<u>62,100</u>

Production expenses	12,400
Administration expenses	8,500
Selling and distribution expenses	5,400
Stores issued to production	54,700
Stores issued to maintenance	2,500
Return to supplier	200
Production overheads absorbed by production	24,500
Administration overheads absorbed by finished goods	15,200
Selling and distribution overheads recovered on sales	9,600
Products finished during the year	1,17,700
Finished goods sold at cost	1,32,300
Sales	1,50,000

You are required to record the entries in the cost ledger for the year and prepare a Trial Balance.

**Q.4.** From the following data in respect of a company, prepare the Journal and the ledger:

Particulars	Dr. Rs.	Cr. Rs.
<b>Closing balance at the end of accounting period:</b>		
Stores Control Account	2,000	-
Work-In-Progress Account	6,000	-
Finished Goods Control Account	8,000	-
Cost Ledger Control Account	-	16,000
<b>Financial transactions during the accounting period:</b>		
Stores purchase		<b>Rs.</b>
- For Stock		38,000
- For Special Jobs		2,000
Wages Analysis		
- Factory		40,000
- Office		4,000
- Sales office		6,000
Goods sold (Sales)		2,00,000
Other expenses		80,000
<b>Cost transactions and cost analysis during the period:</b>		
Materials issued analysis	<b>Rs.</b>	<b>Rs.</b>
- Direct materials		20,000
- Indirect materials(Factory)		10,000
Wages Analysis		
- Direct Wages		30,000
- Indirect Wages (Factory)		10,000
Overhead Incurred and recovered	<b>Incurred</b>	<b>Recovered</b>
Manufacturing	50,000	65,000
Administration	10,000	13,500
Selling and Distribution	20,000	27,000
Goods Finished at Cost	1,20,000	-
Cost of Goods Sold	1,38,000	-

**Q.5.** ABC Ltd. follows non-integrated system of Accounting. Following is the Trial Balance as on 01-01-2012:

Particulars	Dr. Rs.	Cr. Rs.
Stores Ledger Control A/c	2,50,000	-
Work-In-Progress Control A/c	2,00,000	-
Finished Goods Control A/c	3,50,000	-
Financial Ledger Control A/c	-	8,00,000
<b>Total</b>	<b>8,00,000</b>	<b>8,00,000</b>

Following were the transactions during the month of March:	<b>Rs.</b>
Materials Purchased	7,50,000
Materials issued to:	
- Production	3,00,000
- Factory	40,000
- Office	10,000
Total Wages Paid	3,00,000
Direct Wages charged to Production	2,50,000
Indirect Wages	50,000
Office overheads Paid	30,000
Office overheads applied to Finished goods	38,000
Selling and Distribution Overheads incurred	30,000
Selling and distribution Overheads applied to Cost of Sales	31,000
Factory overheads charged to production @ 35% of Direct wages	
Finished goods Produced	8,00,000
Cost of finished goods sold	10,00,000
Sales	12,00,000
Prepare Journal & post them into Ledger:	
(a) Stores Ledger Control A/c	
(b) Work-In-progress control A/c	
(c) Finished goods Ledger control A/c	
(d) Financial Ledger Control A/c	
(e) Factory Overhead Control A/c	
(f) Office Overhead Control A/c	
(g) Selling and Distribution Overhead Control A/c	
(h) Profit and Loss A/c	

**Q.6.** On 31<sup>st</sup> March 2015, the following balances were extracted from the books of East and West company.

Particular	Dr. Rs.	Cr. Rs
Stores ledger control A/c	3,50,000	-
Work-in-Progress Control	3,80,000	-
Finished Goods control A/c	2,50,000	-
Cost ledger Control A/c	-	9,80,000
<b>Total</b>	<b>9,80,000</b>	<b>9,80,000</b>

The following transactions took place in March, 2015:

Particulars	Rs.
Raw Materials:	
- Purchased	9,50,000
- Return to suppliers	30,000
- Issued to production	9,80,000
- Returned to stores	30,000
Productive Wages	4,00,000
Indirect Labour	2,50,000
Factory overheads	5,00,000
Selling and Distribution Overheads	4,00,000
Cost of finished goods transferred to warehouse	21,30,000
Cost of Goods sold	21,00,000
Sales	30,00,000

Factory overheads are applied to production at 150% of Direct wages, any under/over absorbed overhead being carried forward for adjustment in the subsequent months. All selling and distribution overheads are treated as period costs and charged off to the Profit and Loss Account of the month in which they are incurred.

Show the necessary Control Accounts, Costing Profit and Loss Account and the Trial Balance.



- Q.7.** As on 31<sup>st</sup> March, 2011, the following balances were extracted from the books of the Deluxe Manufacturing Company, which follows Non-Integrated System of Cost Accounting:

<b>Particular</b>	<b>Dr. Rs.</b>	<b>Cr. Rs.</b>
Stores Ledger Control A/c	56,000	-
Work-in-Progress Control A/c	60,800	-
Finished Goods Control A/c	40,000	-
General Ledger Control A/c	-	1,56,800
	<b>1,56,800</b>	<b>1,56,800</b>

The following transactions took place in April 2011:

<b>Particulars</b>	<b>Rs.</b>	<b>Particulars</b>	<b>Rs.</b>
Raw Materials: Purchased	1,52,000	Factory overheads expenses incurred	80,000
Returned to suppliers	4,800	Selling & Administrative expenses	64,000
Issued to production	1,56,800	Cost of finished goods transferred to warehouse	3,40,800
Returned to stores	4,800	Cost of Goods sold	3,36,000
Productive wages	64,000	Sales	4,80,000
Indirect Labour	40,000		

Factory overheads are applied to production at 150% of direct wages, any under/over-absorbed overheads being carried forward for adjustment in the subsequent months. All administrative and selling expenses are treated as period costs and charged off to the Profit and Loss Account of the month in which they are incurred:

Show the following accounts in the Company's books:

- (a) General Ledger Control A/c  
(b) Stores Ledger Control A/c  
(c) Work-In-Progress Control A/c  
(d) Finished Goods Stock Control A/c  
(e) Factory overheads Control A/c  
(f) Costing Profit and Loss A/c  
(g) Trial Balance as at 30<sup>th</sup> April, 2011.

- Q.8.** Orange Limited opens the costing record with the balances as on 1<sup>st</sup> January, 2013. From the following information, you are required to record the entries in the Cost Ledger for the year ended 31<sup>st</sup> December 2013 and prepare Trial Balance.

<b>Particulars</b>	<b>Dr. (Rs.)</b>	<b>Cr. (Rs.)</b>
Material Control A/c	1,21,000	
Work-in-Progress Control A/c	59,000	
Finished Stock Control A/c	1,20,000	
Production Overhead Control A/c	5,000	
Administration Overhead Control A/c		9,000
Selling and Distribution Overhead Control A/c	4,000	
General Ledger Adjustment A/c		3,00,000
	<b>3,09,000</b>	<b>3,09,000</b>

Transactions during the year ended 31<sup>st</sup> December 2013:

<b>Particulars</b>	<b>Rs.</b>
Material Purchased	4,77,000
Material issued to jobs	4,74,000
Material to work maintenance	38,000
Material to administration office	1,000
Material to selling department	4,000
Wages – Direct	1,44,000
Wages – Indirect	62,000
Transport for incoming material	5,000
Production overhead	2,48,000
Production overhead absorbed	3,55,000
Administration overhead	67,000
Administration overhead allocated to production	49,000

Administration overhead allocated to sales	12,000
Selling and Distribution overhead	61,000
Selling and Distribution overhead absorbed	79,000
Finished goods produced	9,55,000
Finished goods sold	9,73,000
Sales	12,00,000

**Q.9.** As on 31<sup>st</sup> March, 2013, the following balances existed in Ashish Co. Ltd's Cost ledger.

Particulars	Dr. Rs.	Cr. Rs.
Stores Ledger Control Account	6,02,870	-
Work in progress Control Account	2,44,730	-
Finished Stock Ledger Control Account	5,03,890	-
Manufacturing Overhead Control Account	-	21,050
Cost ledger Control Account	-	13,30,440
<b>Total</b>	<b>13,51,490</b>	<b>13,51,490</b>

During the next three months the following items arose:

Particulars	Rs.
Finished product (at cost)	4,21,670
Manufacturing Overhead Incurred	1,83,020
Raw materials purchased	2,46,000
Factory Wages	1,01,060
Indirect Labour	43,330
Cost of sales	3,71,780
Materials issued to production	2,54,630
Sales return at cost	10,760
Materials returned to suppliers	5,800
Manufacturing overhead charged to production	1,54,400

**You are required to write up:**

- (i) Cost ledger Control account
- (ii) Stores ledger Control account
- (iii) Manufacturing Overhead Control account
- (iv) Work in progress Control account
- (v) Finished Stock Ledger Control Account
- (vi) Trial Balance (indicating, in brief, what each balance represents)
- (vii) Cost of Sales A/c

**Q.10.** As of 31<sup>st</sup> March, 2014 the following balances existed in a firm's cost ledger, which is maintained separately on a double entry basis:

Particulars	Dr. Rs	Cr. Rs
Stores Ledger Control A/c	3,00,000	-
WIP Control A/c	1,50,000	-
Finished Goods Control A/c	2,50,000	-
Manufacturing Overheads Control A/c	-	15,000
Cost Ledger Control A/c	-	6,85,000
	<b>7,00,000</b>	<b>7,00,000</b>

During the next quarter, the following items arose:

	Rs.
Finished Product (at cost)	2,25,000
Manufacturing overhead incurred	85,000
Raw materials purchased	1,25,000
Factory wages	40,000
Indirect labour	20,000
Cost of sales	1,75,000
Materials issued to production	1,35,000
Sales returned (at cost)	9,000

Materials returned to suppliers 13,000  
 Manufacturing overhead charged to production 85,000  
 You are required to prepare the Cost Ledger Control A/c, Stores Ledger Control A/c, WIP Control A/c, Finished Stock Ledger Control A/c, Manufacturing Overhead Control A/c, Wages Control A/c, Cost of Sales A/c, and the Trial Balance at the end of the quarter.

**Q.11.** Following are the balances in Cost Ledger of a Manufacturing Company on 1<sup>st</sup> April, 2015.

Particulars	Debit (Rs.)	Credit (Rs.)
Finished Stock Ledger Control A/c	4,580	-
Factory Overhead Control A/c	1,020	-
Work-in-Progress Control A/c	2,465	-
Stores Ledger Control A/c	4,420	-
Cost Ledger Control A/c	-	12,485

Following are the transactions for the month ending on 30<sup>th</sup> April, 2015:

Particulars	Rs.
Raw material purchases	64,500
Materials issued to production	51,520
Factory wages	12,840
Factory overhead incurred	8,120
Indirect labour	2,460
Factory overhead charged to production	11,600
Cost of sales	57,850
Sales return at cost	1,000
Finished product at cost	67,500
Sales	60,000

Prepare the following cost controls accounts:

- (i) Cost ledger Control Account
- (ii) Work in progress Ledger Control Account
- (iii) Finished stock Ledger Control Account
- (iv) Stores Ledger Control Accounts
- (v) Cost of Sales Account
- (vi) Works Overheads Control Account
- (vii) Costing P & L Account

**Q.12.** Following are the balances in Cost ledger of a Manufacturing Company on 1<sup>st</sup> April, 2014.

	Debit (Rs.)	Credit (Rs.)
Stores ledger Control Account	17,000	-
Work-In-Progress Ledger Control Account	22,800	-
Finished Stock ledger Control Account	12,000	-
Cost Ledger Control Account	-	51,800

You are given the following information for the year ending 31<sup>st</sup> March, 2015.

Particulars	Rs.
Purchase of materials	50,000
Direct Factory Wages	70,000
Manufacturing Expenses	44,600
Selling and Distribution Expenses	15,400
Material issued to production	47,200
Manufacturing Expenses Recovered	44,440
Selling and Distribution Expenses Recovered	15,320
Sales	1,60,000
Stock of Materials at end	19,800
Stock of Finished Goods at end	14,700
Work-In-Progress at end	24,700

Prepare related Cost Control Accounts.

**Q.13.** Cost Ledger of a company shows the following balances as on 1<sup>st</sup> April, 2016.

Particulars	Debit(Rs.)	Credit(Rs.)
Finished Stock Ledger Control A/c	6,840	-
Work-in-Progress Ledger Control A/c	27,400	-
Stores Ledger Control A/c	10,500	-
Cost Ledger Control A/c	-	44,740
	44,740	44,740

**Transactions for the year 2016-17 are as below:**

Direct Wages	88,400
Works overheads allocated to production	29,500
Stores issued to production	87,500
Goods finished during the year	2,30,000
Finished goods sold (No stock left at the year-end)	2,75,000
Stores Purchased	97,500
Stores issued to factory repairs only	1,500
Carriage inwards on stores issued for production	600
Work expenses	4,500
Office and Administration expenses	6,500

You are required to prepare:

- |                                       |  |
|---------------------------------------|--|
| (i) Cost ledger control account       | (ii) Cost of sales account                 |
| (iii) Works overheads control account | (iv) Stores ledger control account         |
| (v) WIP ledger control account        | (vi) Finished stock ledger control account |

**Q.14.** Pass the journal entries in the cost books of (non-integrated system) for the following transactions:

- Materials worth Rs.25,000 returned to the stores from job.
- Gross total wages paid Rs.48,000. Employer contribution to P.F and state Insurance amounts to Rs.2,000. Wages analysis book detailed Rs.20,000 towards direct labour, Rs.12,000 towards indirect factory labour, Rs.10,000 towards salaries, etc. to office staff and Rs.8,000 for salaries etc. to selling and distribution staff.

**Q.15.** Pass the journal entries for the following transactions in a double entry cost accounting system:

<b>(a) Issue of materials:</b>	<b>Rs.</b>
Direct	5,50,000
Indirect	1,50,000
<b>(b) Allocation of wages and salaries:</b>	
Direct	2,00,000
Indirect	40,000
<b>(c) Overheads absorbed in jobs:</b>	
Factory	1,50,000
Administration	50,000
Selling	30,000
<b>(d) Under/over absorbed overheads:</b>	
Factory (over)	20,000
Administration (under)	10,000

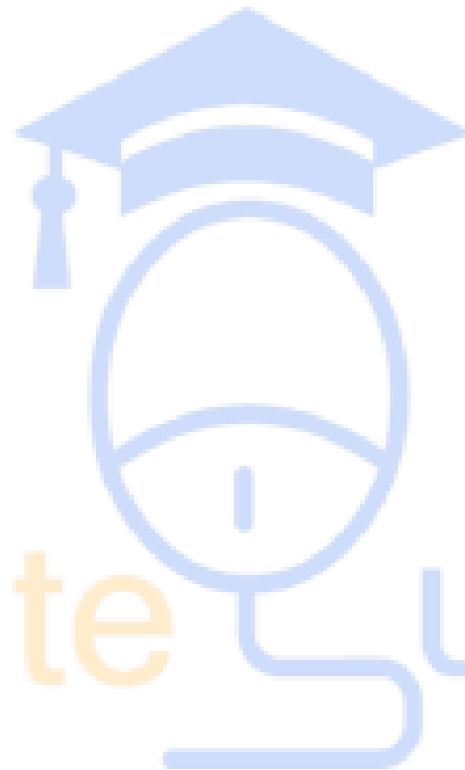
**Q.16.** From the following figures ascertained from Costing records and financial Books of a factory, you are required to pass necessary entries in the cost journal (assume that a system of maintain control accounts prevails in the organization.)

Particulars	Rs.
Purchases	3,90,000
Carriage inward	5,850



Wages	6,15,000
Production Labor	5,90,000
Unproductive Labor	25,000
Works Overheads allocated to Production Order	1,79,000
Works Expenses	1,40,000
Administration Expenses	18,000
Administration Overheads allocation to Production Order	18,400
Goods Finished during the year	11,72,000
Finished Goods Sold(Cost)	12,00,000
Sales Expenses	13,400

Pass Journal Entries.



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