CA Inter (IPC)

COSTING

1 Day Marathon Revision

Faculty for <u>CA Inter COSTING, FM, ECO, Indirect Tax (GST)</u>

Live Classes at Pune & Virtual Classes Across India

CA RAHUL GARG

B.COM, FCA, LCS, ACMA, DISA (ICAI),
CFA (ICFAI), MBA, ADV. DIP. MGT.

ALL INDIA RANKHOLDER

in CA, CS, CMA (incl. AIR 1)

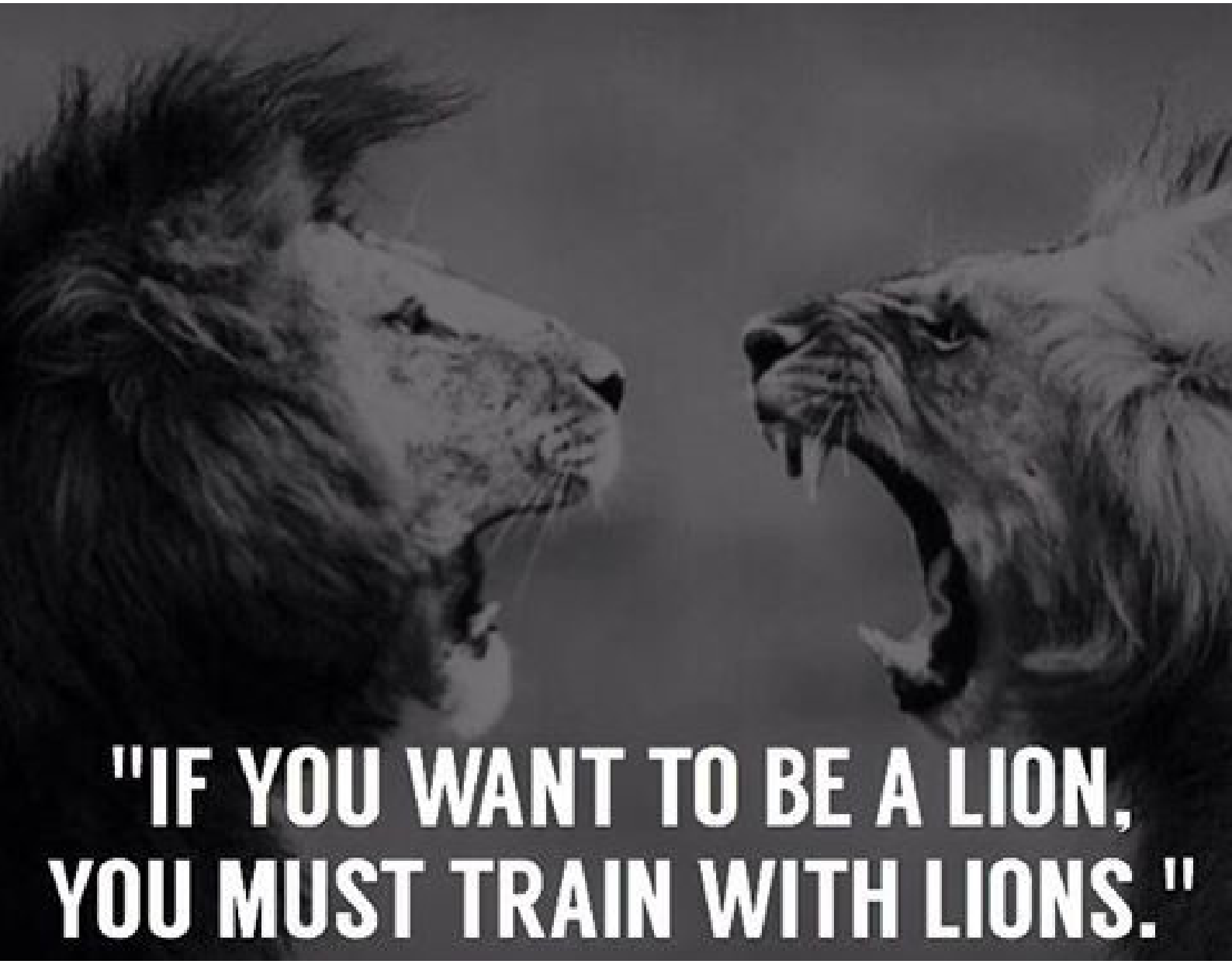
<u>GOLD MEDALIST</u>

Tribute to my Beloved Elder Brother

SACHIN GARG

(Inspiration for me and all my students)

who left for heavenly abode on 3rd May, 2015


"IF YOU WANT TO BE A LION,
YOU MUST TRAIN WITH LIONS."

COST AND WORKS ACCOUNTS EXAM

"No excuses for go-getters"

Monetary hardship, partial vision loss and a parent's illness, could not stand in the way of 23-year-old Rahul's success. Today, Rahul who is also a qualified CA and CS, is in a position to care for his parents and chart out a successful career for himself. He aspires to start his own practice at the age of 35

by Urmila Rao

This Chandigarh boy appeared for the CWA exam in June 2009, and simultaneously wrote the Company Secretary (CS) final exams. "I had cleared the second levels i.e., the Intermediate Levels of both CWA and CS, securing first rank in the former and fourth in CS," says Rahul. "One is eligible to attend both the exams, without the dates overlapping," he adds

CWA course can be completed in three stages; Foundation, Intermediate and Final. Minimum eligibility for the Foundation is Class 12. Graduates are exempted from the Foundation Level

The CWA qualification trains a candidate in areas of accounting, cost and management, audit and tax functions among others, and a CWA professional maintains and scrutinises statutory book of accounts, prepares cash budgets, cash flow statements. Of late, they also provide consultancy services to corporate business houses.

"Enrolment to the Intermediate/ Foundation Course is open throughout the year and the exams are conducted in June and December," he shares.

A certified CWA and CS, Rahul is also a qualified Chartered Accountant, currently working as senior In-charge, Accountant and Assurance at global firm Grant Thornton

Rajesh Thakur/Outlook Group

RAHUL GARG
LOCATION: Chandigarh
ROLL NO: 900879
PERCENTAGE: 64.38
YEAR: 2009

After completing Class 12 at the Government Model School in 2004 and topping with 90.20 percent marks, Rahul enrolled in the CA course simultaneously with BCom, graduated in 2006 and obtained CA qualification in 2008.

But the journey to the top was not easy. Rahul, the third and youngest child in the family, was no stranger to financial hardships. His father is a driver by profession and his mother, a homemaker. And by sheer bad luck, Rahul lost partial vision during a game of bow and arrows.

But despite tough times during childhood, Rahul's confidence reigns supreme. "For go-getters, there are no excuses," says Rahul. Inspired by his neighbours whose economic situation improved immensely after a family member became a Chartered Accountant after completing the CA programme successfully, Rahul decided to follow suit. "The fact that a CA has the authority to authenticate a company's balance sheet, also fascinated me," says Rahul.

Currently pursuing Chartered Financial Analyst (CFA) Programme and an MBA (Finance) from ICFAI, the ambitious young man aims to complete both courses in a span of two years and get a dual degree. Next in the line are, an I.S.A (Information Systems Audit) from Institute of Chartered Accountants of India, followed by certificates from CIMA (Chartered Institutes of Management Accountants, UK) and IMA (Institute of Management Accountants, USA).

"I want to study and be recognised in my area of work," he says about his acquisitions. Though the CWA qualification is perceived as being a notch below CA with a 40-45 percent of average salary difference, it's the diverse knowledge and increased perspective that is fascinating. "A wider knowledge base will enable me to hold a top corporate position at an early age," he says.

Despite his doctor's advice not to strain his eyes, Rahul remains academically active. Post work, he coaches CA and CWA aspirants. He has also authored four books for commerce graduates. "I have presented the content in a simple, systematic, interesting format," says Rahul, who wants to start his own practice by the time he turns 35.

RAHUL'S STUDY STRATEGIES

- Allotted five hours a day for two months to his toughest subjects - Management Accounting & Financial Analysis and Direct Taxes. Coaching in these areas also helped
- Referred to books by Munish Bhandari for Law, V K Aggarwal for Auditing, and Bangar for Indirect Taxes. His favourites are Tulsian and G Sekar
- Coaching classes helped but it was his self-study which helped him ace professional exams such as CA, CS and CWA
- A positive attitude was a must, and he put in "200 percent" in attempt 1, as failure and reappearing for an exam was not an option

Chandigarh Toppers of Cost FM (May 2016)

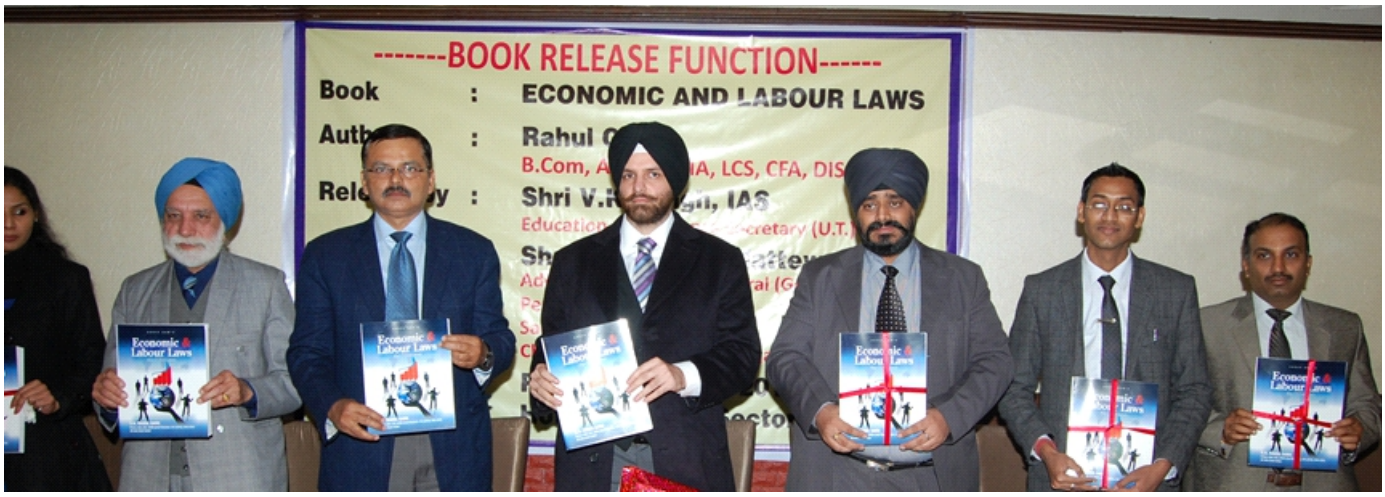
1. **Shreshtha (on Left) – 91 Marks**

2. **Iram (on Right) – 73 Marks**

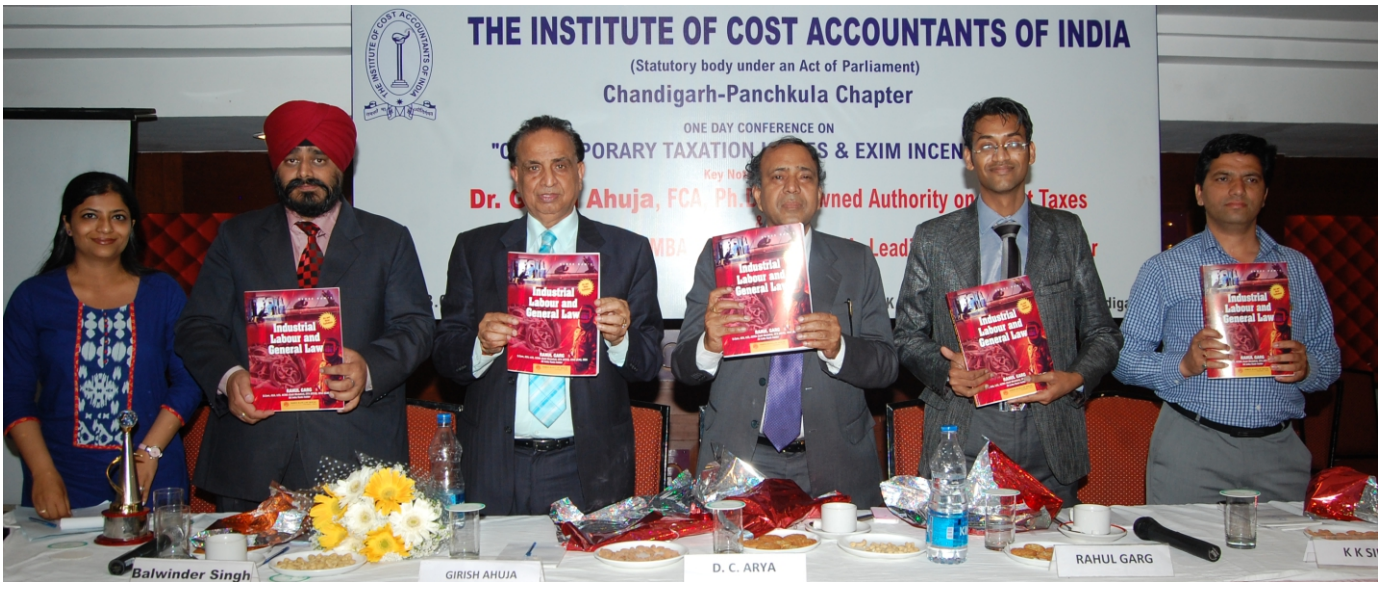
With ICAI(Cost) President Sh. Kunal Banerjee (for getting All India Rank 1)

Awarded by **Chief Justice Sh. P.N.Bhagwati in presence of Sh. Atal Bihari Vajpayee**

Being Awarded with **CA Degree by ICAI President Sh. Amarjit Chopra**



"Economic & Labour Laws" book being released by Education Minister of UT Sh. VK Singh (IAS) in presence of then Chairman of Chandigarh chapter of ICAI, ICSI, ICAI (Cost)



"Industrial, Labour & General Laws" book being released by Dr. Girish Ahuja (A Renowned Personality in Direct Taxes) and Dr. D.C. Arya (Director Finance of Indian Railway)

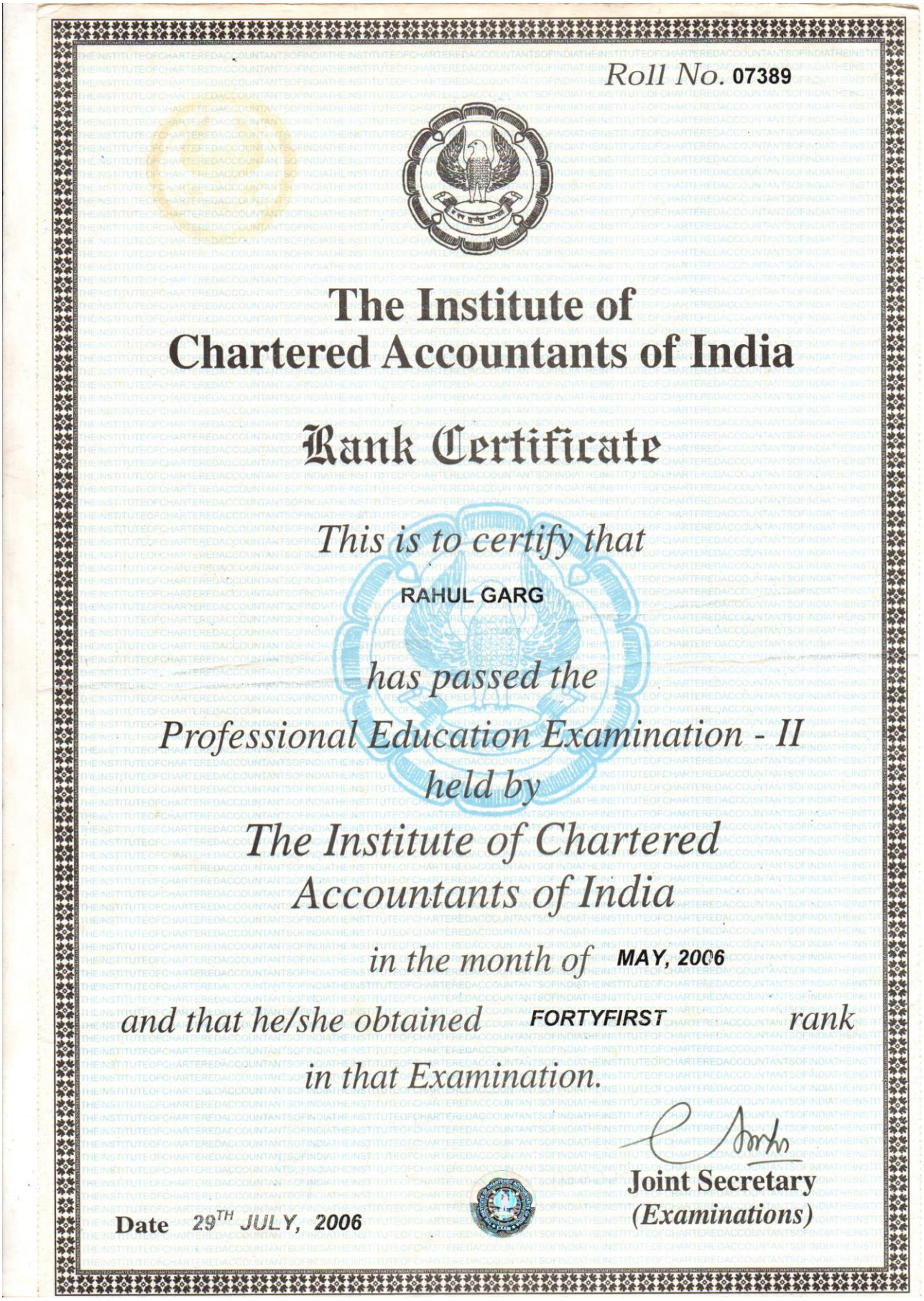
A brief about Rahul Garg

1. Broke **LIMCA BOOK OF RECORDS** by being youngest in India to clear all the 3 professional courses CA, CS, CMA at the age of 22 years 7 months with Ranks **(A Record).**
2. **5 times All India Rankholder in Professional Exams (A Record).**
3. Scored SINGLE DIGIT RANK 3 times (including **All India Rank 1).**
4. Undisputed achiever of all 3 professional exams with **ALL INDIA RANK in ALL.**
5. Achieved **exemption in 40+ papers** out of total 50 papers held by CA, CS, CMA institutes in his academic career.
6. Awarded by **Mr. Atal Bihari Vajpayee** in 2010 for exceptional performance in Academics.
7. One of the **best motivator** in India.
8. Covered by the National Magazine 'Career 360' amongst **12 National Toppers** in 2010.
9. Specialist in **Time management** and **Stress management skills**.

Love for the subject COST ACCOUNTING & FM

1. First in India to provide **Multi Colour Theory** notes in Cost FM.
2. **Tabular** and **Diagrammatic presentation** of Theory to create interest.
3. Important points of theory Specially marked for **last minute revision**.
4. **Simple and lucid language** in theory for easy understanding.
5. Only one in India to cover more than **2000 Practical Questions** in Cost FM.
6. More than **90% coverage of Practical Questions in CA IPCC** Exams since May 2014 from Rahul sir's notes.
7. His student Shareshtha Kadian scored **91 Marks in Cost FM in May 2016.**
8. Focus on **100% conceptual clarity** and maximum practice of questions.
9. **Special focus on Presentation** and "How to Attempt" to score more than average marks.

RANK Certificate for **All India Rank 41** (May 06) in CA PE II Exam (now CA Inter)



Roll No. 07389

The Institute of Chartered Accountants of India

Rank Certificate

This is to certify that

RAHUL GARG

has passed the

Professional Education Examination - II

held by

The Institute of Chartered Accountants of India

in the month of MAY, 2006

and that he/she obtained FORTYFIRST *rank*

in that Examination.

Joint Secretary
(Examinations)

Date 29TH JULY, 2006

RANK Certificate for **All India Rank 4** (June 08) in CS Inter Exam

The Institute of
Company Secretaries of India
IN PURSUIT OF PROFESSIONAL EXCELLENCE
Statutory body under an Act of Parliament

Certificate of Merit

This is to certify that

RAHUL GARG

has passed all the papers of the

INTERMEDIATE EXAMINATION

of Company Secretaryship held in the month of

JUNE, 2008

and has secured

FOURTH RANK

in the order of merit in the said examination.

Date of Issue : 1st December, 2008
Roll Number : 12715
MC Number : 473

Authorised Signatory

Secretary & CEO

RANK Certificate for **All India Rank 13** (June 09) in CS Professional (Final) Exam

THE INSTITUTE OF
Company Secretaries of India
IN PURSUIT OF PROFESSIONAL EXCELLENCE
Statutory body under an Act of Parliament

Certificate of Merit

This is to certify that

RAHUL GARG

has passed all the papers of the

PROFESSIONAL PROGRAMME EXAMINATION

of Company Secretaryship held in the month of

JUNE, 2009

and has secured

THIRTEENTH RANK

in the order of merit in the said examination.

Date of Issue : *11 January, 2010*

Roll Number : *57870*

MC Number : *1,053*

Authorised Signatory

Secretary & CEO

RANK Certificate for **All India Rank 1** (June 08) in CMA Inter Exams

Regn. No. NRS/012986

The Institute of Cost and Works Accountants of India

This

Rank Certificate

is awarded to

RAHUL GARG

for his/her having passed in one sitting all the subjects of the **Intermediate** Examination of The Institute of Cost and Works Accountants of India held in the month of **June 2008** and for his/her having secured the **First** Rank.

Given under the Common Seal of The Institute of Cost and Works Accountants of India, this Twenty fourth day of August, 2008.

President

Institute's Gold Medal for **All India Rank 1** (June 08) in CMA Inter Exams

NRS/012986 No. 19

The Institute of Cost and Works Accountants of India

This is to certify that

Rahul Garg

has been awarded the following prizes for his having passed the Intermediate Examination of the Institute of Cost and Works Accountants of India held in June 2008

NAME OF THE PRIZE	PRIZE AWARDED FOR
Institute's First Prize for General Proficiency	Gold Medal for securing the highest total marks without exemption in **Intermediate (Revised) Examination – June 2008**
G. Indira Debi Memorial Gold Medal	For securing the highest total marks without exemption in **Intermediate (Revised) Examination – June 2008**
U.N. Sur Memorial Cash Prize	For securing the highest total marks without exemption in **Intermediate (Revised) Examination – June 2008**
A.K. Biswas Foundation Book Prize	For securing the highest total marks without exemption in **Intermediate (Revised) Examination – June 2008**
Northern Coalfields Limited Merit Award – Book Prize	For securing the highest total marks without exemption in **Intermediate (Revised) Examination – June 2008**
Bikramjit Majumdar Memorial Book Prize	For securing the highest total marks in Stage - I of **Intermediate (Revised) Examination – June 2008**

Given under the Common Seal of the Institute of Cost and Works Accountants of India, this Twenty eighth day of January 2009.

President

RANK Certificate for **All India Rank 3** (June 09) in CMA Final Exams

90167 Regn. No. NRS/012986

The Institute of Cost and Works Accountants of India

This

Rank Certificate

is awarded to

RAHUL GARG

for his/her having passed in one sitting all the subjects of the **Final** Examination of The Institute of Cost and Works Accountants of India held in the month of **June** 2009 and for his/her having secured the **Third** Rank.

Given under the Common Seal of The Institute of Cost and Works Accountants of India, this Twenty Ninth day of August, 2009.

President
(G. N. VENKATARAMAN)

RAHUL SHIKHA ACADEMY

RSA

Quest For Excellence

CA Inter

- Cost Accounting
- Financial Management
- Economics
- GST

Regular Lectures

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Google Drive

www.carahulgarg.com

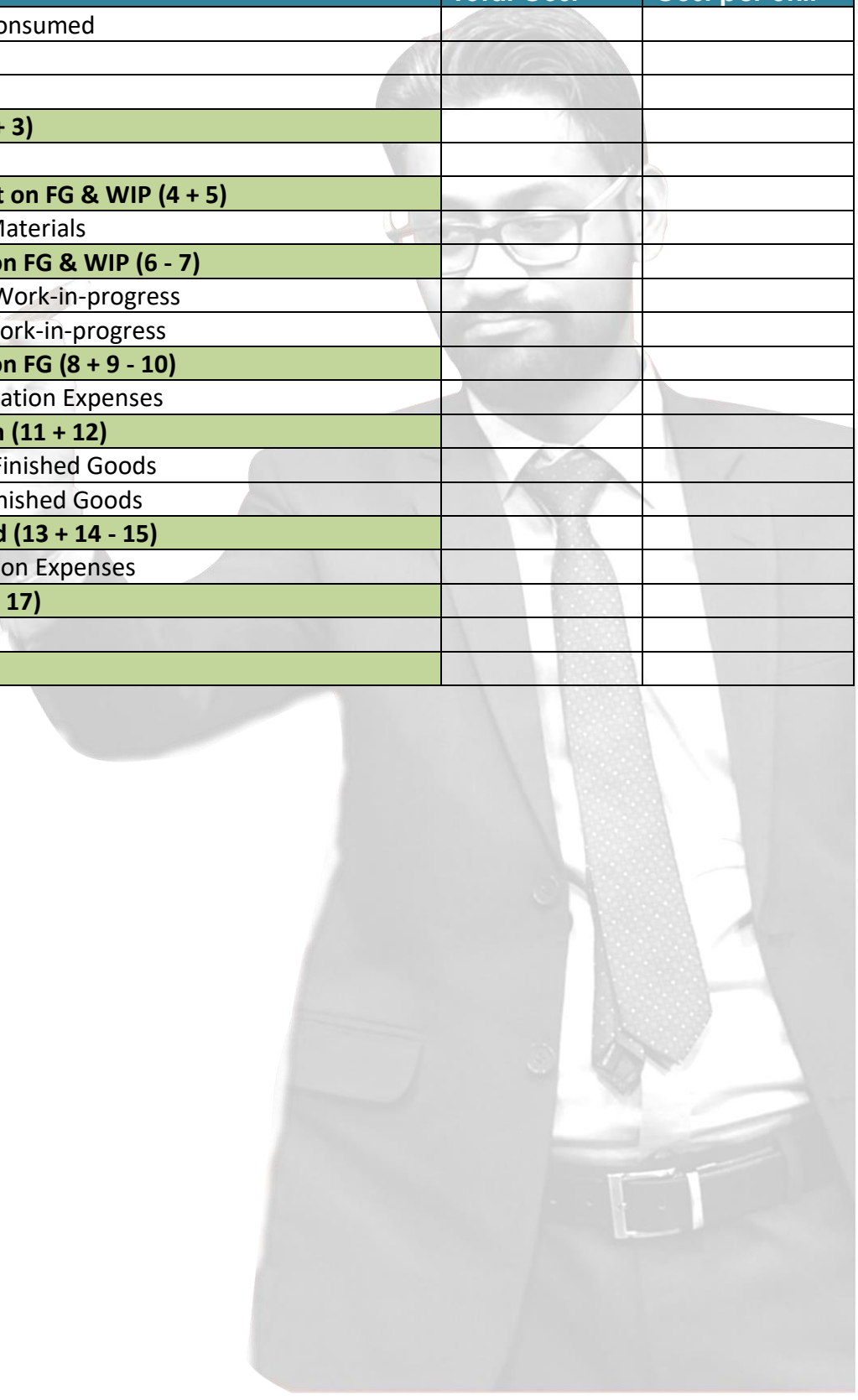
Phone No : Enquiry - 7447383081

Phone No : Technical Support - 7517675498

Follow On

⇒Format of OLD Cost Sheet

S.No.	Particulars	Total Cost	Cost per unit
1.	Direct Materials Consumed		
2.	Direct Labour		
3.	Direct Expenses		
4.	**Prime Cost (1 + 2 + 3)**		
5.	Works Overheads		
6.	**Gross Factory Cost on FG & WIP (4 + 5)**		
7.	Scrap of Indirect Materials		
8.	**Net Factory Cost on FG & WIP (6 - 7)**		
9.	Opening Stock of Work-in-progress		
10.	Closing Stock of Work-in-progress		
11.	**Net Factory Cost on FG (8 + 9 - 10)**		
12.	Office & Administration Expenses		
13.	**Cost of Production (11 + 12)**		
14.	Opening Stock of Finished Goods		
15.	Closing Stock of Finished Goods		
16.	**Cost of Goods Sold (13 + 14 - 15)**		
17.	Selling & Distribution Expenses		
18.	**Cost of Sales (16 + 17)**		
19.	Profit		
20.	**Sales (18 + 19)**		



⇒Format of NEW Cost Sheet

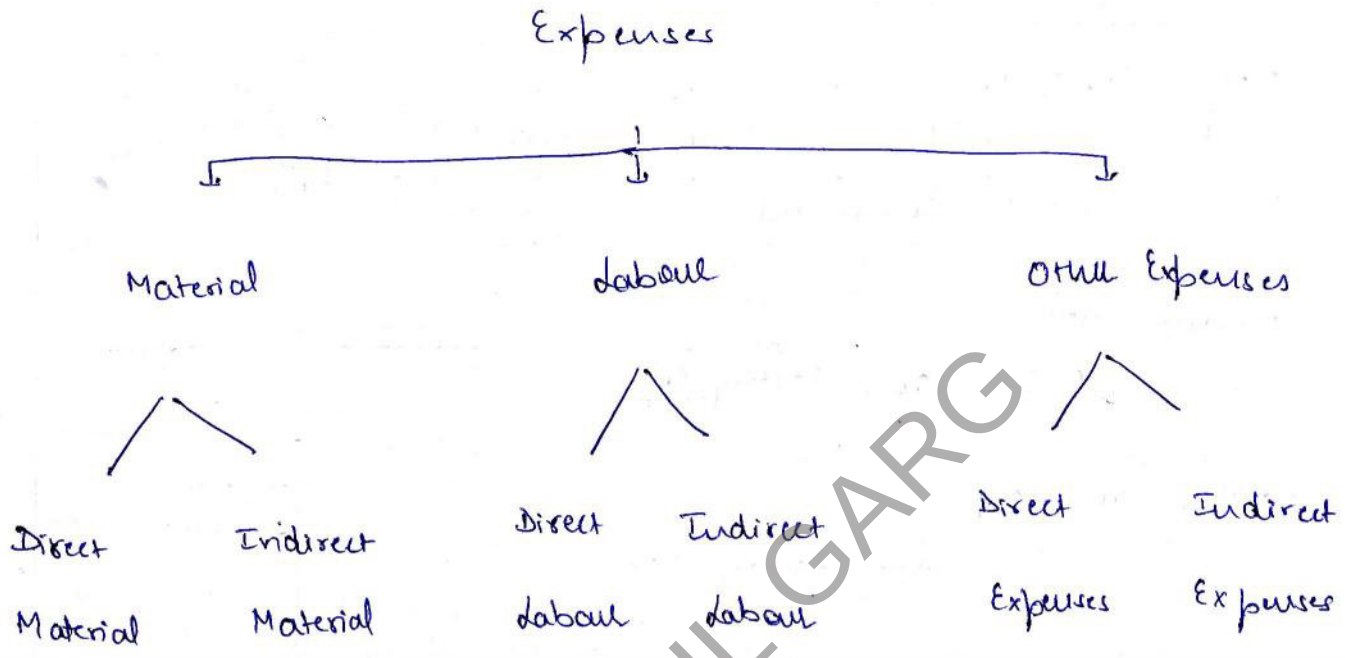
S.No.	Particulars	Total Cost	Cost per unit
1.	Direct Materials Consumed		
2.	Direct Labour		
3.	Direct Expenses		
4.	**Prime Cost (1 + 2 + 3)**		
5.	Works Overheads		
6.	**Gross Factory Cost on FG & WIP (4 + 5)**		
7.	Opening Stock of Work-in-progress		
8.	Closing Stock of Work-in-progress		
9.	**Net Factory Cost on FG (6 + 7 - 8)**		
10.	Quality Control Cost		
11.	Research & Development Cost		
12.	Administration Overheads (relating to production activity)		
13.	Less : Credit for Recoveries/ Scrap/ By-Products/ Misc. income		
14.	Add : Packing Cost (Primary)		
15.	**Cost of Production (9 + 10 + 11 + 12 – 13 + 14)**		
16.	Opening Stock of Finished Goods		
17.	Closing Stock of Finished Goods		
18.	**Cost of Goods Sold (15 + 16 - 17)**		
19.	Administrative Overheads (General)		
20.	Marketing Overheads (Selling & Distribution Expenses)		
21.	**Cost of Sales (18 + 19 + 20)**		
22.	Profit		
23.	**Sales (21 + 22)**		

⇒Terms used in New Format of Cost Sheet

Quality Control Cost	✓ This is the cost of **resources consumed towards quality control** procedures.
Research & Development cost	✓ It includes only those research and development related cost which with is incurred in **improvement of process, system, product or services**.
Administr-ative Overheads (related to production)	✓ It includes the **cost of production administration** only. The general administration overhead is not included in production cost.
Credit for recoveries	✓ It is the realised or **realisable value of scrap** or waste.
Packing Cost (primary)	✓ Packing material which is **essential to hold and preserve the product** for its use by the customer.
Packing Cost (secondary)	✓ Packing material that enables to **store, transport, inform the customer**, promote and otherwise make the product marketable.

Chaptel - 1

Cost Sheet



Particulars	Amount (₹)
Direct Material Consumed	
Direct Labour	
Direct Expenses	
Prime Cost	
Factory O/Hs	
Gross Factory Cost	
- Sale of Scrap	
Net Factory Cost	
+ Opening Stock of WIP	
- closing Stock of WIP	
Net Factory Cost	
Office O/Hs	
Cost of Production	
+ Opening Stock of finished Goods	
- closing	
= Cost of Goods sold	
Selling & Distribution O/Hs	
= Cost of Sales	
+ Profit	
= Sales	

Conversion cost vs. Factory cost

Valuation of closing stock of finished Goods

- in absence of opening stock
  - Cost of Production/Unit = Cost of Production / No. of Units Produced
- in presence of opening stock
  - FIFO → Cost of Production/Unit = Cost of Production / No. of Units Produced
  - Weighted Average → Cost of Production/Unit = (Cost of Production + Cost of opening St.) / (No. of Units Produced + Opening Stock Units)

Value of closing stock = No. of Units of closing stock × Cost/Unit (of Production)

Chapter - 2

Material Costing

EOQ and Related Concepts

$$EOQ = \sqrt{\frac{2 \times A \times O}{C}}$$

EOQ

Units

Ⓐ Annual Demand (Units)

Ⓞ Ordering Cost / Order (₹)

Ⓒ Carrying cost per Unit P.a. (₹)

[Cost/Unit × Carrying cost %]

₹

Annual Demand (₹)

[Annual Demand (Units) × Cost/Unit]

Ordering cost / order (₹)

Carrying cost (%)

↓

Short cut Formula

$$\text{No. of Orders P.a.} = \frac{\text{Annual Demand}}{EOQ}$$

$$\text{Order Frequency / Time between 2 orders} = \frac{360 \text{ Days} / 52 \text{ weeks} / 12 \text{ Months}}{\text{No. of Orders P.a}}$$

Computation of Cost

	Relevant cost / Related cost / System cost / Variable Cost	Total Cost
	↓	↓
PC	X	✓
OC	✓	✓
CC	✓	✓
	↓	↓

$$OC + CC = \sqrt{2 \times A \times O \times C}$$

PC = Annual Demand (Units) × Cost Price / Unit

OC = No. of Orders × Ordering Cost / Order

↓

[Ann. Demand / EOQ]

CC = Average Inventory × Carrying Cost Per Unit P.a

↓

EOQ / 2

EOQ Vs. Non EOQ (Without Discount)

EOQ Vs. Non EOQ (With Discount)

Price Break

Stock levels

(1.) Reorder level = Maximum Consumption × Maximum Lead Time

(Or)

Safety stock level + (Normal Consumption × Normal lead Time)

(2.) Minimum level = Reorder level − (Normal Consumption × Normal Lead Time)

(3.) Maximum level = Reorder level + Reorder Quantity − (Minimum Consumption × Minimum lead Time)

(4.) Average level = $\frac{\text{Minimum level} + \text{Maximum level}}{2}$

(Or)

Minimum level + $\frac{1}{2}$ (Reorder Qty.)

(5.) Danger level = Minimum Consumption × Maximum Lead Time for Emergency Purchases

Material Turnover Ratio

$$= \frac{\text{Cost of raw materials consumed}}{\text{Average stock of raw material}}$$

$$= \underline{\quad\quad} \text{ times}$$

Material Holding Period

$$= \frac{360 \text{ Days} \;/\; 52 \text{ Weeks} \;/\; 12 \text{ Months}}{\text{Material T/o Ratio}}$$

$$= \underline{\quad\quad} \text{ Days / Weeks / Months}$$

Analysis

	HIGH	Low
MTR	Fast	slow
MHP	slow	Fast

Computation of Materials Cost → Inclusions & Exclusions

- Purchase Price
- Trade Discount
- Quantity discount
- Cash Discount
- Subsidy / Grant
- Road Tax / Toll Tax / Entry Tax / Octroi
- CST
- VAT
- Excise Duty
- Custom Duty
- Demurrage
- Detention charges
- Freight
- Cost of containers

Any particular order?

Invoice Price

− Trade Discount

= Net Invoice Price

+ Excise Duty

= Net Inv. Price (incl. ED)

+ Sales Tax

= Net Inv. Price (incl. ED & Sales Tax)

Purchase of > 1 Material in same Order

Expense	Apportionment
• Sales Tax	Invoice Price
• Freight	Purchase Qty
• Octroi	Net Qty Recd.

$$\text{Stock Rate} = \frac{\text{Total Cost of Purchase}}{\text{Effective Qty}}$$

Stores Ledger

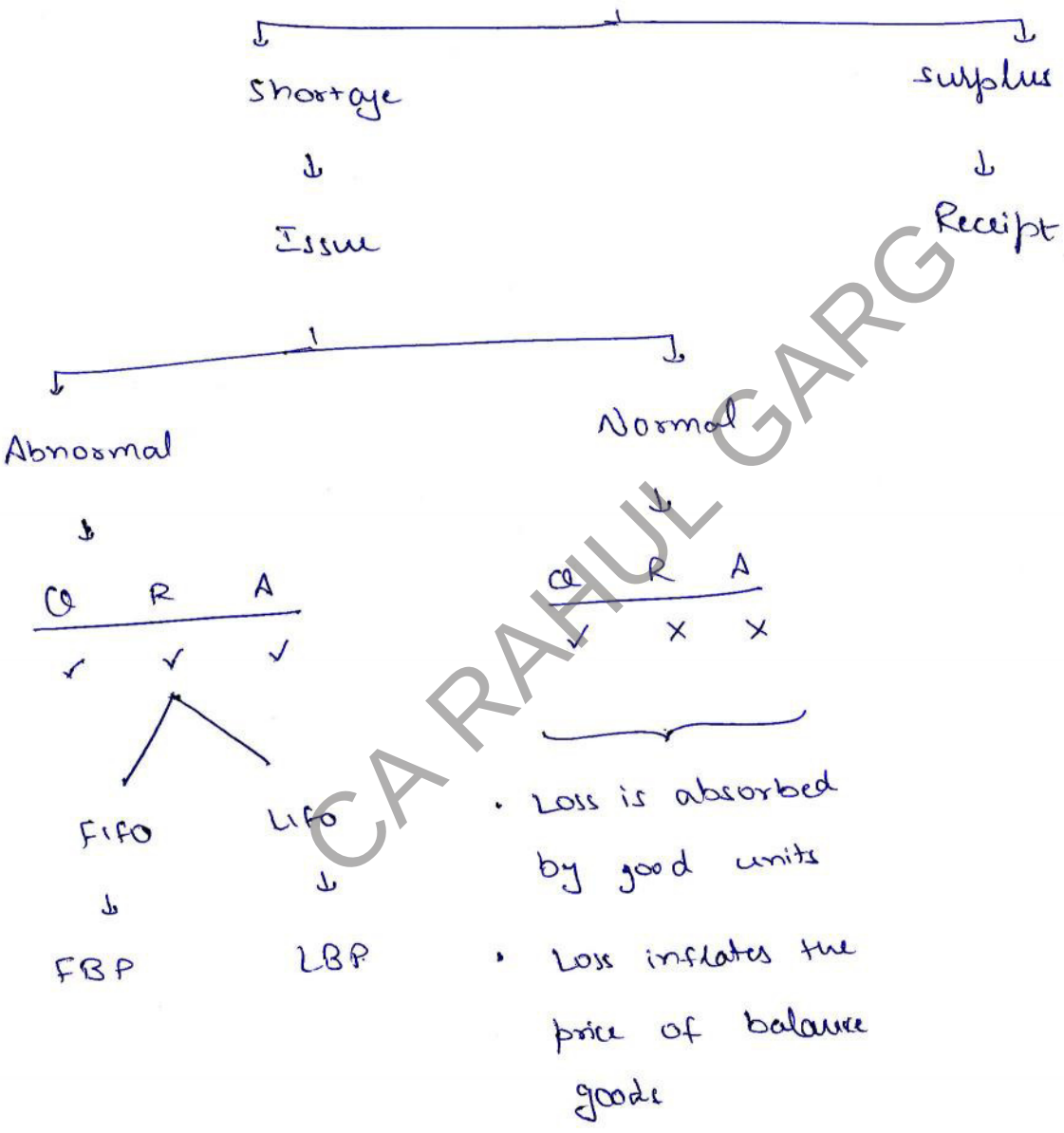
Date	Receipts			Issues			Balance		
	Qty.	Rate	Amt	Qty.	Rate	Amt	Qty.	Rate	Amt

- Purchase of Material @ rate, when such rate is already appearing in Balance column.
- Freight amt. given along with Purchase Price.
- Transfer from 1 Job to other Job
- Transfer from 1 Deptt to other Deptt.
- Return to Supplier

* Return from Production to Stores

- Question specifies date of issue
  - value at the price of issue of such date
- Question doesn't specify date of issue
  - value at the price of latest issue
    - FIFO
      - Write at the top in Balance col.
    - LIFO
      - Write at the bottom of Balance column.

Difference Between Book Quantity and Physical Quantity



Chapter - 3

Labour Costing

Labour Turnover Ratio

(1) Separation Method = $\frac{\text{No. of Workers Seperated}}{\text{Avg. No. of Workers}} \times 100$

(2) Replacement Method = $\frac{\text{No. of Workers Replaced}}{\text{Avg No. of Workers}} \times 100$

(3.) Flux Method

(a) Variant 1 : $\frac{\text{No. of Workers Seperated} + \text{No. of Workers Replaced}}{\text{Avg. No. of Workers}} \times 100$

(b) Variant 2 : $\frac{\text{No. of Workers Seperated} + \text{No. of Workers Replaced} + \text{No. of Workers hired as per expansion}}{\text{Avg. No. of Workers}} \times 100$

(4) Lab. T/o Ratio due to new recruitment = $\frac{\text{No. of Workers hired as per expansion}}{\text{Avg no. of Workers}} \times 100$

(5) Lab T/o Ratio due to accessions = $\frac{\text{No. of Accessions}}{\text{Avg. no. of Workers}} \times 100$

Avg. No. of Workers = $\frac{\text{Workers in the beginning} + \text{Workers at the end}}{2}$

Computation of Workers at the end

Workers in the beginning
+ Workers replaced
+ Workers recruited under expansion
− Workers seperated
= Workers at the end

Conversion of Given LTR into Annual LTR

$$= \frac{\text{LTR computed for given period}}{\text{Days / Months in given Period}} \times \frac{\text{365 Days / 12 Months}}{}$$

Impact of Labour Turnover

- Given Cost
  - Settlement Cost
  - Recruitment Cost
  - Selection Cost
  - Training Cost
- Computed Cost
  - Cost of Rectification
  - Contribution lost due to unproductive Hours

Computation of Labour Hour Rate

Computation of Wages

Basic Pay

Dearness Allowance

Leave Salary

Bonus

Canteen Subsidy

Gross Wages

+ E's contribution to Pf

+ E's contribution to ESI

Labour Cost

- e's cont. to Pf

- e's cont. to ESI

Net Wages

Computation of Effective Hrs

Total Days Available

- Leave Days
- Holidays

= Actual Days Worked

× Hrs. / Day

= Actual Hrs. Available

- Normal Idle Time

Two Broad Methods of Payment

- Time Rate
  - No. of Hours × Rate/Hour
- Piece Rate
  - No. of Pieces × Rate/Piece

Computation of Efficiency

- On basis of Output
- On basis of Time

Incentive Plans

· Taylor's Differential Piece Rate System

Efficiency	Payment
< 100%	83% of Piece Rate
≥ 100%	125% of Piece Rate

· Merrick Differential Piece Rate System

Efficiency	Payment
≤ 83%	Normal
> 83% ≤ 100%	110% of Piece Rate
> 100%	120% of Piece Rate

· Emerson Efficiency System

Efficiency	Payment
< $66\frac{2}{3}$ %	No Bonus
≥ $66\frac{2}{3}$ % ≤ 100%	20% Bonus
> 100%	20% Bonus + additional 1% for each 1% increase in efficiency beyond 100%

Gantt Task Bonus

Efficiency	Payment
Below standard	Guaranteed Time Rate
At standard	Time Rate + 20% bonus
Above standard	High Piece Rate

Bedaux Point Premium System

$$\text{Earnings} = \left[\text{Hours Worked} \times \text{Rate/Hour}\right] + \left[\frac{\text{B}}{100} \times \frac{\text{Bedaux Point saved}}{60} \times \text{Rate/Hour}\right]$$

Barth Premium System

$$\text{Earnings} = R \times \sqrt{S \times H}$$

R – Rate / Hour

S – standard Time

H – Actual Time

Halsey Plan

$$(T \times R) + \frac{1}{2} (S - T) \times R$$

Rowan Plan

$$(T \times R) + \frac{S - T}{S} \times T \times R$$

R - Rate / Hour

T - Actual Time for Actual Production

S - Standard Time for Actual Production

Treatment of Idle Time

- Normal
  - Unavoidable
    - Charged to factory O/H
- Abnormal
  - Avoidable
    - Charged to Costing P/L A/C

Treatment of Overtime

Basic Rate + OT Rate + OT Premium

(a) OT is done regularly - Each job is charged with weighted Rate/Hour

(b) OT is done to meet irregular production requirements
- Normal wages for all hrs. charged to Direct Labour
- OT Premium charged to factory O/Hs

(c) OT is done as per customer requirement
- Labour cost is charged to each job with actuals

(d) OT is done due to abnormal circumstances
- OT wages charged to costing P/L A/c

(e) OT done can be attributed to fault of any particular department
- OT wages charged to that specific department

Chapter – 4

Overheads

Under/over absorption of O/Hs

Absorbed Overheads = Actual Base × Predetermined O/H Recovery Rate

Actual Overheads = Given amt. – adjustments (if any)

Actual vs. Absorbed O/H

- Actual O/H > Absorbed O/H
- Actual O/H = Absorbed O/H
- Actual O/H < Absorbed O/H

Treatment of under/ over absorption

- Abnormal Reason
- Normal Reason

Distribution of O/Hs

Primary Summary

↓

Allocation and apportionment of expenses for the first time amongst

- Production Deptts.
- Service Deptts.

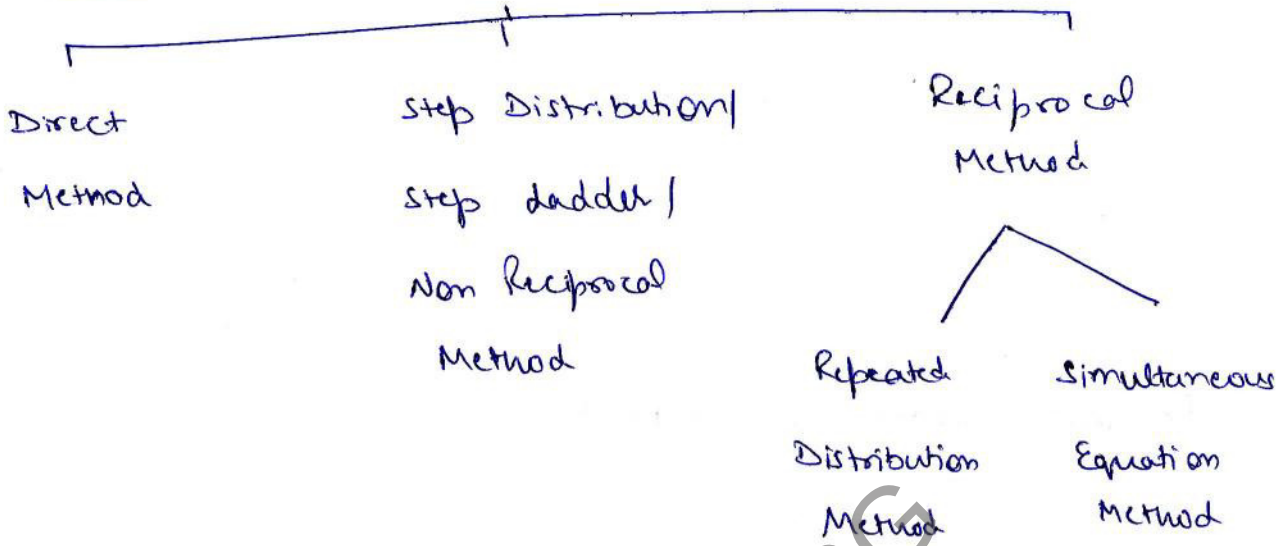
Secondary Summary

↓

Redistribution of O/Hs of Service Deptts.; back over the Production Deptts.

Format of Primary Summary

Methods for secondary summary



Direct Method

Step Ladder Method

Repeated Distribution Method

Simultaneous Equation Method

Let total O/H of S_1 = Σx

S_2 = Σy

x = S_1 own O/hs + share of S_2

y = S_2 own O/hs + share of S_1

Machine Hour Rate

Expenses

- **Standing**
  - Rent
  - Lighting
  - Foreman salary
  - Indirect charges
  - Manager salary
  - Departmental O/Hs
- **Machine**
  - Depreciation
  - Repairs
  - Power
  - Fuel
  - Electricity
  - Consumable stores

S.No.	Particulars	Computation	Amt. (₹)
(A)	Standing Expenses		
1.			
2.			
3.			
4.			
	Total standing Exp		
	Total Machine Hrs		
	St. Exp. / Machine hour		
(B)	Machine Expenses		
1.			
2.			
3			
	Mach. Exp / Hour.		
(C)	Machine Hour Rate	A + B	

Total Machine Hours − Maintenance Hrs. − Set Up Time (if unproductive)

Computation of Recovery Rate

$$= \frac{\text{Amt. of Overheads}}{\text{Base}} \times 100.$$

Base can be

: Direct Materials (₹)

: Direct Wages (₹)

: Prime Cost (₹)

: Direct Labour Hours

: Machine Hours

Departmental Rate vs. Blanket Rate

Chapter - 5

Budgetary Control

Computation of Ratios

- Efficiency Ratio = $\frac{\text{Standard Hours}}{\text{Actual Hours}} \times 100$

- Activity Ratio = $\frac{\text{Standard Hours}}{\text{Budgeted Hours}} \times 100$

- Capacity Ratio = $\frac{\text{Actual Hours}}{\text{Budgeted Hours}} \times 100$

Budgeted Hours = Budgeted Hours for Budgeted Production

Actual Hours = Actual Hours for Actual Production

Standard Hours = (Standard) Hours for Actual Production
Budgeted

Flexible Budget

S. No.	Particulars	Level 1	Level 2	Level 3	Level 4
(A)	Sales				
(B)	Cost				
	: Fixed				
	: Variable				
	: Semi-Variable				
(C)	Profit (A − B)				

Cost

- Fixed → It remains same at all the levels of output
- Variable → It varies with the output proportionately
- Semi-Variable → It varies with the output but not proportionately

Segregation of Semi-Variable Cost

$$VC/U = \frac{\text{Change in Cost}}{\text{Change in Units}}$$

Fixed Cost = Total Cost − Total Variable Cost

Functional Budget

Finished Product

↓

Production Budget

↓

Sales

+ closing stock

- opening stock

Raw Materials

↓

Consumption Budget

↓

Production (units)

×

RM Required/ Unit of FP

Purchase Budget

↓

(Units)

↓

RM consumption

+ closing stock

- opening stock

= RM Purchase (Qty)

× Cost Price/Unit

= RM Purchase (₹)

Chapter - 6

Contract Costing

Books of Contractor

Contract A/c

for the year ending .....

Particulars	Amt.	Particulars	Amt.
To Material : Opening balance		By WIP : WC	
+ Directly purchased		: WUC	
+ Transferred from Job		: Escalation	
+ Supplied from stores		By P/L : loss on sale of - Plant	
- Transferred To Job		- Material	
To Labour		By Bank : sale of - Plant	
To Supervision		- Material	
To Overheads		By P/L : Abnormal loss - Plant	
To General charges		- Material	
To Plant : opening Balance		By Material Ret. to store	
To P/L : Profit on sale of - Plant		By Plant Ret. to store	
- Material		By Material at site	
To Notional Profit c/d		By Plant : closing Balance	
		By P/L : loss on contract	
To P/L		By Notional Profit b/d	
To WIP Reserve			

Profit/loss on contract

Contract is completed in the year in which it is started

- Profit
- loss

Transferred to P/L A/c

Contract is completed in any year other than that, in which it was started

- loss
- Profits

Find Degree of Completion

$$\frac{UC}{CP} \times 100 = \_\_\_\_\ \%$$

< 25%	≥ 25% ≤ 50%	≥ 50% < 90%	≥ 90%
Amt. Taken to P/L : NIL	$NP \times \frac{1}{3} \times \frac{CR}{WC}$	$NP \times \frac{2}{3} \times \frac{CR}{WC}$	On the base of Estimated Profits

If WC ≥ 90% of CP

- find EP ⇒ CP
  - ACTD
  - FEC
  } TEC

- Amt. taken to P/L A/c

(a) $EP \times \frac{CR}{CP}$

(b) $EP \times \frac{WC}{CP}$

(c) $EP \times \frac{ACTD}{TEC}$

(d) $EP \times \frac{ACTD}{TEC} \times \frac{CR}{WC}$

(e) $NP \times \frac{CR}{WC}$

(f) $NP \times \frac{WC}{CP}$

EP – Estimated Profit

NP – Notional Profit

WC – Work Certified

CP – Contract Price

CR – Cash Received

ACTD – Actual Cost Till Date

FEC – Further Estimated Cost

TEC – Total Estimated Cost

Total Work

Contractee A/c

To Bal c/d	=	By Cash	=
		By bal. b/d	
To Bal c/d		By Cash	
	=		=
To Contract		By Bal. b/d	
	=	By Cash	=

B/s extract as on ---

Liabilities	Amt	Assets	Amt.
P/L A/c		Plant at site	
O/s wages		Plant at store	
O/s Expenses		Material at site	
		Material at Store	
		WIP WC	
		+ WIC	
		− WIP Reserve	
		− Cash Received	

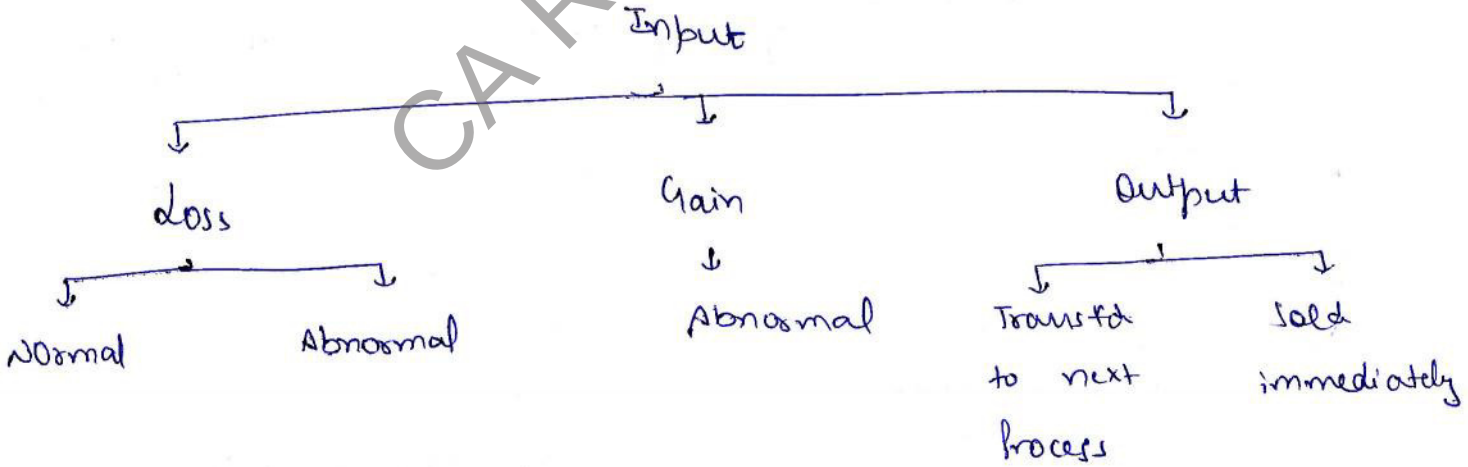
Chapter - 7

Process Costing

Process A/c

Particulars	Units	Amt	Particulars	Units	Amt
To Material			By Process — A/c / Finished stock A/c		
To Labour					
To Expenses					
To Other Exp.					

Process Losses & Gain.



Inter Process Profits

Process A A/c

Particulars	Cost	Profit	Total	Particulars	Cost	Profit	Total
To Direct Material				By Process B A/c			
To Direct Labour							
To Prime Cost of Goods Produced							
(-) closing stock							
To Prime Cost of Goods Transfd.							
To Profit							

Actual Realised Profits

Process Profit + Unrealised profit in opening stock − Unrealised Profit in closing stock

A

B

C

FG

Value of closing stock

closing stock as Given in Question − Unrealised Profit in closing stock

A

B

C

FG

Particulars	Cost	Profit	Total	Particulars	Cost	Profit	Total
To opening Stock							
To Material							
To Labour							
To Prime Cost of Goods Produced							
(-) closing Stock							
To Prime Cost of Goods Transferred							
To Factory O/Hs							
To Factory Cost of Goods Transferred							
To Profit							

Treatment of WIP

	Type 1	Type 2
Opening WIP	X	✓
closing WIP	✓	✓

Statement of Equivalent Production

Input	Units	Output	Units	Material		Labour		Overheads	
				DOC	ECU	DOC	ECU	DOC	ECU

Statement of Cost

S.No.	Particulars	Cost	ECU	Cost/ECU

Statement of Valuation

- Impact of opening WIP (FIFO)

- Impact of opening WIP (Weighted Average)

Joint & By Product

Apportionment of Joint Cost

(1.) Physical Unit Method

Joint Cost 30000 ₹

A 6000 Units B 3000 Units C 1000 Units

(2.) Average Cost Method

$$\text{Avg. Cost P.U.} = \frac{\text{Total Joint Cost}}{\text{Total Units}}$$

Share in JC = Units Produced × Avg. Cost/Unit

(3.) Survey / Point value Method

Share = Units Produced × Points Allocated

(4.) Contribution Margin Method

JC

Variable cost → Units Produced

Fixed cost → Contribution Margin.

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Follow On

(5.) Market Value at Seperation Point Method

Product	Units	SP at split off	SP after processing	Further Processing Cost
P	10000	40	70	250000
Q	20000	30	65	300000
R	30000	20	40	750000
S	40000	10	20	200000

Joint Cost - ₹ 5,00,000

(a) Apportion the Joint Cost on basis of Sales Value at Split off Point

(b) What will be the profit if all the products are sold at split off point.

(c) What will be the profit if all the products are sold after further processing ?

(d) Advice the management.

(6) Market value after Seperation Point Method

(7) Net Realisable Value Method

Sales value after further processing

(-) Further Processing Cost

= NRV

(8) Reverse Cost Method

Sales value

(-) Profit

= Cost of sales

(-) Selling & Dist Exp

= Cost of Production

(-) Administration Exp

= Factory Cost

(-) Further Processing Cost

= Balance

Example

X Ltd. manufactures Main Product M_1 and two By-Products B_1 & B_2. For January 2017, following details are available:

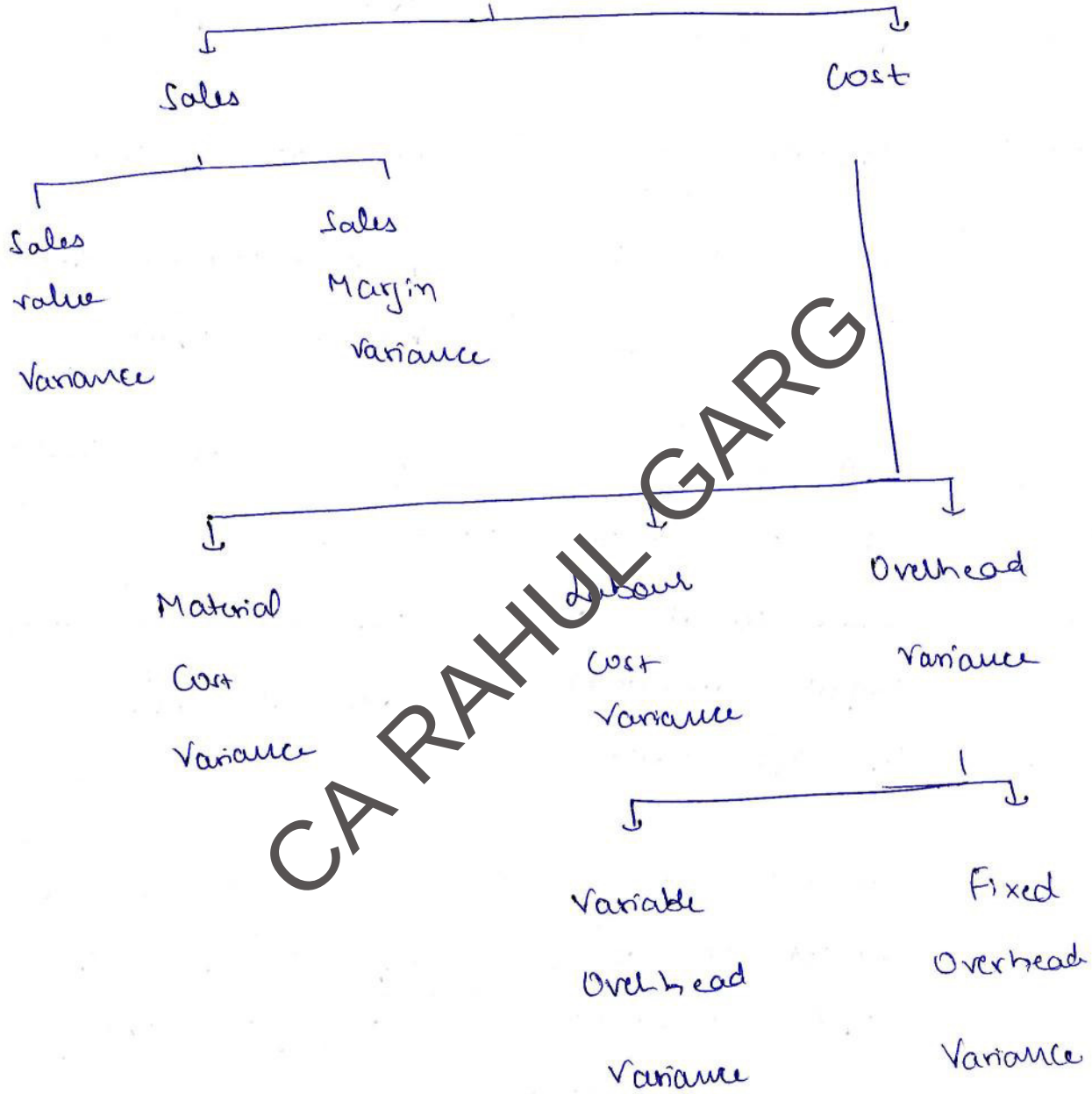
Total cost upto seperation ₹ 2,12,400

	M_1	B_1	B_2
Cost after seperation	–	35000	24,000
No. of Units Produced	4000	1400	3000
Selling Price per Unit	100	40	30
Estimated Profit (%)	–	20%	30%
Estimated Selling Expenses as % of Sales value	20%	15%	15%

Show allocation of Joint Cost and the profitability for January 2017.

Chapter- 8

Standard Costing



Material Cost Variance

M_1 = Actual cost of Material Consumed

= Actual Qty. of Input consumed × Actual Material Cost/ Unit of Input

M_2 = Standard Cost of Actual Material Quantity

= Actual Qty. of Input Consumed × Standard Material Cost/ Unit of Input

M_3 = Standard cost if Actual Material Quantity is in standard Ratio

= Actual Quantity of Input Consumed (in Std. Ratio) × Std. Material Cost/ Unit of Input

M_4 = Budgeted Cost of Material consumed

= Budgeted Qty. of Input consumed × Std. Material Cost/ Unit of Input

(or)

Standard Material Cost for Actual Production

= Actual Production × Std. Material cost/ Unit of Output

↓

[Actual I/P − Actual Loss]

Material Cost Variance

$M_4 - M_1$

- Material Price Variance: $M_2 - M_1$
- Material Usage Variance: $M_4 - M_2$
  - Material Mix Variance: $M_3 - M_2$
  - Material Yield Variance: $M_4 - M_3$

Question

For making 10 kg. of 'x'; standard material requirement is

Material	Quantity	Rate/kg (₹)
A	8	6
B	4	4

During April, 1000 kg. of 'x' were produced. Actual consumption of materials is as under:

Material	Quantity	Rate/kg (₹)
A	750	7
B	500	5

Compute Material Variances

Fixed Overhead Variances

FO_1 = Actual fixed O/Hs Incurred

FO_2 = Budgeted fixed O/Hs

FO_3 = Stdd. fixed Overheads for Actual Days Worked

= Actual Days Worked × Stdd. fixed OH / Day

↓

$$\frac{\text{Budgeted fixed O/Hs}}{\text{Budgeted Days}}$$

FO_4 = Stdd. fixed Overheads for Actual Hrs. Worked

= Actual Hrs. Worked × Stdd. fixed OH/ Hour

↓

$$\frac{\text{Budgeted fixed O/Hs}}{\text{Budgeted Hours}}$$

FO_5 = Stdd. fixed Overheads for Actual Output

= Actual Output × Stdd. fix. OH./ Unit of output

↓

$$\frac{\text{Budgeted fixed O/Hs}}{\text{Budgeted Output}}$$

Fixed O/H Cost Variance

$FO_5 - FO_1$

- Fixed O/H Expenditure Variance: $FO_2 - FO_1$
- Fixed O/H Volume Variance: $FO_5 - FO_2$
  - Fixed O/H Calendar Variance: $FO_3 - FO_2$
  - Fixed O/H Capacity Variance: $FO_4 - FO_3$
  - Fixed O/H Efficiency Variance: $FO_5 - FO_4$

Example

VSMART Ltd. has furnished following information for Aug, 2017.

	Budget	Actual
Output (Units)	30,000	32,500
Hours	30,000	33,000
Fixed overhead (₹)	45,000	50,000
Working Days	25	26

Compute Fixed O/H Variances.

Chapter - 9

Marginal costing

- **Income Statement**

Contribution

- Sales – variable Cost
- SP/U – VC/U = cont/U.
- No. of Units sold x cont/U = Total Cont.
- fixed cost + Profit

Variable Cost

- SP/U – Contribution /U = VC/U
- No. of Units sold x VC/U Total VC
- Sales – Contribution

Contribution Ratio or P/V Ratio or Variable Profit Ratio

if one set of data is given

↓

$$\frac{\text{Contribution}}{\text{Sales}} * 100$$

if two set of data is given

↓

$$\frac{\text{Change in contribution}}{\text{Change in Sales}} \times 100$$

Break Even Point

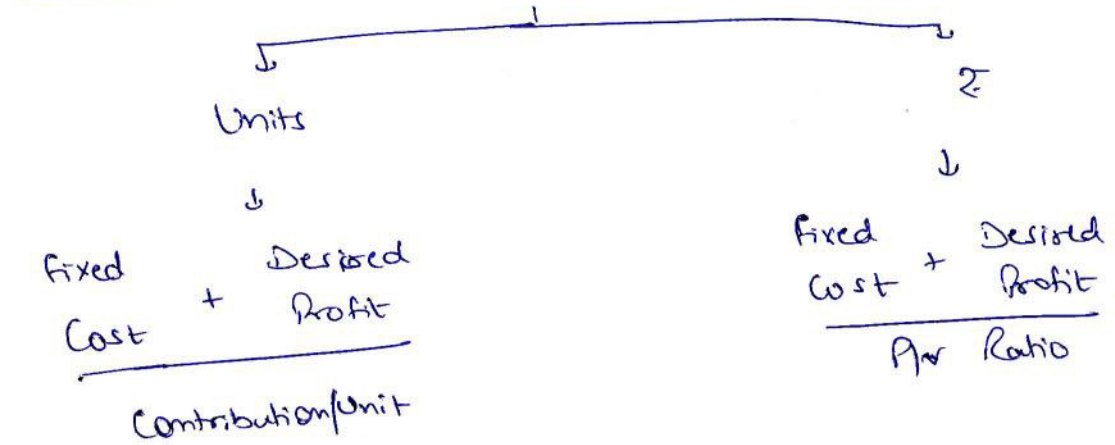
Units	₹	%
$\frac{\text{Fixed Cost}}{\text{Cont. /u}}$	$\frac{\text{Fixed Cost}}{\text{P/V Ratio}}$	$\frac{\text{B E P}}{\text{Total Sales}} \times 100$

Margin of Safety

Units	₹	%
$\frac{\text{Profit}}{\text{Contribution/u}}$	$\frac{\text{Profit}}{\text{P/V ratio}}$	$\frac{\text{MOS (₹)}}{\text{Actual Sales (₹)}} \times 100$

(OR) Actual Sales − Break Even Sales

Sales To Earn Desired Profit



Merged Plant

Chapter - 10

Reconciliation of Cost & financial A/c

Profit as per Cost Accounting

+ Incomes as per financial A/c only

+ Profits _____

- Expenses _____

- Losses _____

- Appropriations _____

+ over recovery of expense in cost A/c

- under _____

+ Excess valuation of opening stock in Cost A/c

- _____ closing _____

- Under valuation of opening _____

+ _____ closing _____

+ Notional Expenses Taken in Cost A/c only

= Profit as per financial Accounting _____

Memorandum Reconciliation A/c

Chapter 11

Integral and Non Integral System

(1.) Material

(a) Purchase : Stores ledger Control (SLC) A/c
TO General ledger Adj. A/c (GLA)

(b) Purchase Return: GLA A/c
TO SLC A/c

(c) Loss (i) Normal : Prod. O/H control A/c
TO SLC A/c

(ii) Abnormal : costing P/L A/c
TO SLC A/c

(d) Absorption
(i) Direct : WIP Control A/c
TO SLC A/c

(ii) Indirect : Prod. O/H control A/c
Adm. O/H control A/c
Selling & Dist. O/H Control A/c
TO SLC A/c

(2) Labour / Wages

(a) Expense : Wages Control A/c
To GLA A/c

(b) Absorption

(i) Direct : WIP Control A/c
To Wages Control A/c

(ii) Indirect : Prod. O/H control A/c
Adm. O/H control A/c
S & D. O/H control A/c
To Wages Control A/c

(3) Direct Expenses

(a) Expense : Direct Expense control A/c
To GLA A/c

(b) Absorption : WIP Control A/c
To Direct Exp Control A/c

(4) Production overheads

(a) expense : Production O/H Control A/c
To GLA A/c

(b) Absorption : WIP Control A/c
To Production O/H control A/c

(5.) Transfer of Cost of Finished Product

FG Control A/c

To WIP Control A/c

(6) Administration O/H

(a) Expense : Admin. O/h control A/c

To GLA A/c

(b) Absorption : FG control A/c

To Admn. O/h Control A/c

(7.) Transfer of COGS

Cost of sales A/c

To FG Control A/c

(8.) Selling & Distribution O/hs

(a) Expense : Sell & Dist O/H control A/c

To GLA A/c

(b) Absorption : Cost of Sales A/c

To Sell & Dist O/H Control A/c

(9.) Transfer of Cost of Sales

Costing P/L A/c

To Cost of Sales A/c

(10) Sales

GLA A/c

To Costing P/L A/c

(11) (a) Profit : Costing P/L
TO GLA A/c

(b) Loss : GLA A/c
TO Costing P/L A/c

(12) Under/over Recovery

(a) Under Recovery : Costing P/L A/c
TO ____ control A/c

(b) Over Recovery : ____ control A/c
TO Costing P/L A/c

Chapter -12

Service / Operating Costing

Absolute Tonne Km

= No. of Tonnes Carried × No. of Kms (Distance)

Commercial Tonne Km

= Average Tonnes Carried × Total Kms. (Distance)

Example

A Lorry starts with a load of 24 tonnes of goods from station A. It unloads 10 tonnes at station B and balance at station C. It reaches back directly to station A after getting reloaded with 18 tonnes of goods at station C. Distance between A to B, B to C and C to A is 270, 150 & 325 Kms. Compute Absolute & Commercial Tonne Kms.

About the Author...

RAHUL GARG *is an energetic professional and his distinguished & exceptional teaching style has made thousands of aspiring professionals to conquer their exams successfully.*

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- ✓ Past Secretary, ICAI (Cost)

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