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CA Rahul Garg

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B.COM, FCA, LCS, FCMA, DISA (ICAI), CFA (ICFAI),
MBA, ADV. DIP. MGT.
5 TIMES ALL INDIA RANKHOLDER IN CA, CS, CMA
3 TIMES SINGLE DIGIT RANK (INCLUDING RANK 1)

RAHUL SHIKHA ACADEMY
RSA
Quest For Excellence

www.carahulgarg.com
7447383081, 7517675498

Tribute to

My Beloved Elder Brother

Sachin Garg

(Inspiration for me and all my students)
who left for heavenly abode on **3rd May, 2015**

" — Rahul Sir — "

Always Believes That

" If You Want To Be A Lion, You Must Train With Lions. "

CA RAHUL GARG

Know Your Mentor
CA Rahul Garg

Cleared all the 3 Professional courses
CA, CS, CMA
at the age of
22 years 7 months
with Ranks

5 times All India Rankholder
in Professional Exams
(A Record).

Scored SINGLE DIGIT RANK 3 times
(including
All India Rank 1).

Achieved exemption in 40+ papers out of total 50 papers
held by CA, CS, CMA
institutes in his
academic career.

Awarded by Mr. Atal Bihari Vajpayee
in 2010 for exceptional
performance in
Academics.

One of the best motivator in India
to push the students
beyond their limits.

Covered by the National Magazine 'Career 360 - Outlook
Group' amongst 12
National Toppers
(across all streams)
in 2010.

Specialist in
Time management
and
Stress management
skills.

CA RAHUL GARG

Love For the Subject
Adv. Acc. , Cost & FM Sm

Only one in India to cover maximum Practical Questions in Cost, FM, Accounts.

Only one in India to give Homework for all Practical Subjects (to instill discipline and confidence) and check the same even in online class.

Tabular and Diagrammatic presentation of Theory to create interest.

Important points of theory Specially marked for last minute revision.

Simple and lucid language in theory for easy understanding.

Focus on 100% conceptual clarity Fully Exam Oriented Lectures.

Special Tips on Presentation and "How to Attempt" the paper to score wonderful marks.

Maximum students scoring Exemptions in each attempt.

Pioneer of MARATHON SESSIONS in country for the benefit of students.

Test Series, Doubt Sessions & Revision Support for all students of the profession.

Outstanding Reviews by the students regarding all the subjects.

Exhaustive Material covering all questions of module, RTP, MTP, and Past Exams.

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

ICSI 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 : 37870
MC Number : 1,053

Authorised Signatory

Secretary & CEO

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 Dela 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. Bowen Foundation Book Prize	For securing the highest total marks with one exemption in Intermediate (Revised) Examination – June 2008
Neelkanta Goclhade 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-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

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)

INDEX

COST SHEET

CONCEPT	CLASSIFICATION OF EXPENSES

Material   **Labour**   **Expenses**

Direct Material   Indirect Material   Direct Labour   Indirect Labour   Direct Expenses   Indirect Expenses

Direct Cost / Prime Cost

Indirect Cost / Overheads

① Production Overheads

② Office & Administration Overheads

③ Selling & Distribution Overheads
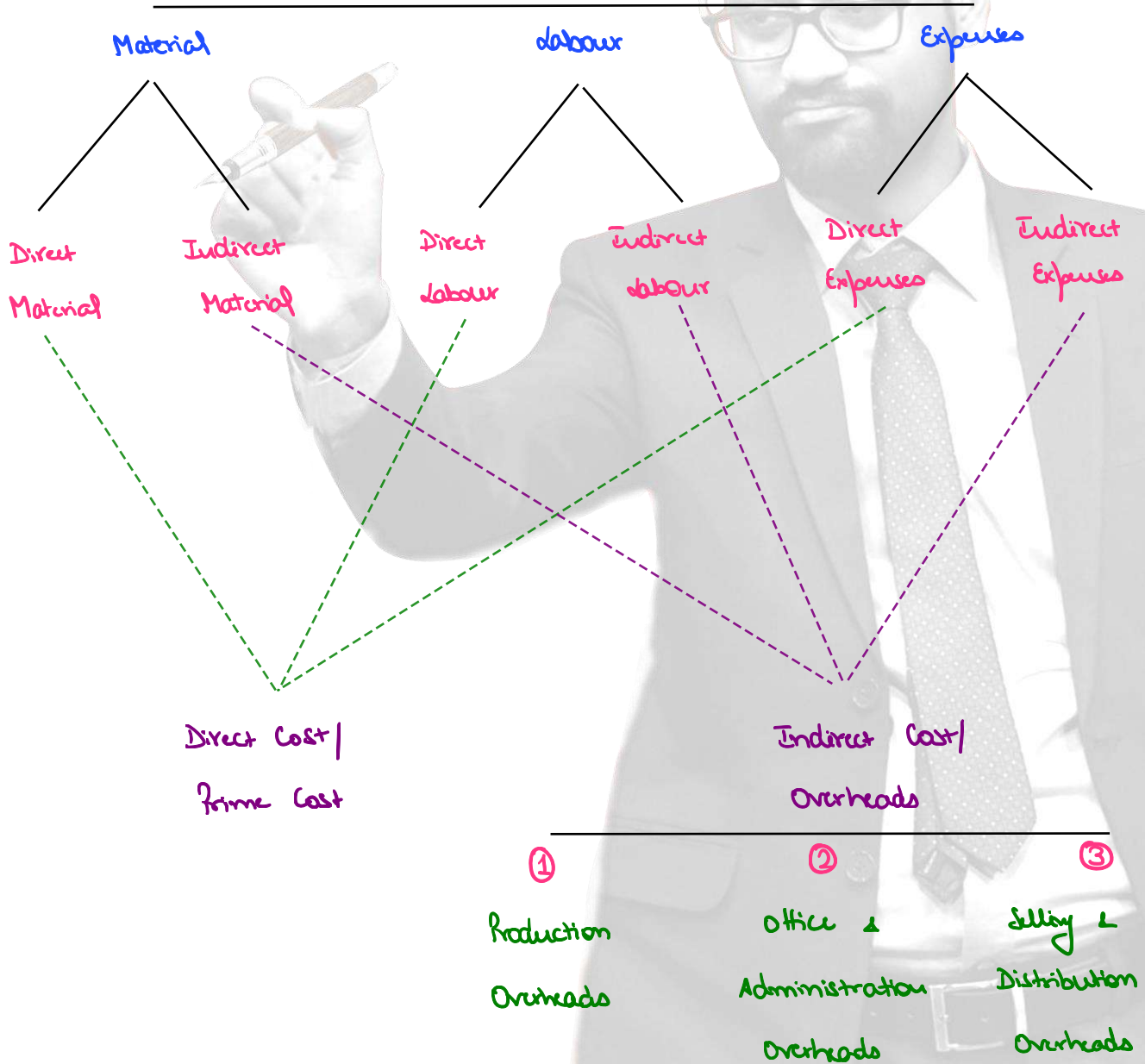
If written

: Indirect Material

: Indirect Labour

CONCEPT	COST SHEET (NEW FORMAT)

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)		

(i)   Opening Stock of RM

    + Purchases of RM

    − Purchase Return of RM   — ABL of RM

    + Carriage Inwards   — NL Scrap of RM

    − Closing Stock of RM

CONCEPT	PRIME COST VS. FACTORY COST VS. CONVERSION COST

	Prime Cost	Conversion Cost	Factory Cost
Direct Material			
Direct Labour			
Direct Expenses			
Factory Overheads			

CONCEPT	VALUATION OF CLOSING STOCK OF FINISHED GOODS

Closing stock (Units) = Units Produced − Units sold

Closing stock (₹) = Closing stock (Units) × Cost of Production/Unit

Cost of Production / Unit

In absence of Opening stock

In Presence of Opening Stock

FIFO

Weighted Average

$$\frac{\text{Cost of Production}}{\text{Units Produced}}$$

$$\frac{\text{Cost of Production} + \text{Cost of opening stock}}{\text{Units Produced} + \text{opening stock Units}}$$

CONCEPT	SPECIAL TREATMENT OF SEMI-VARIABLE OVERHEADS WHEN THE PRODUCTION CAPACITY VARIES DURING THE YEAR

- ✓ Maximum production capacity of JK Ltd. is 5,20,000 units per annum.
- ✓ Semi variable Overheads are ₹ 5,60,000 per annum up to 50% capacity and additional ₹ 1,50,000 per annum for every 25% increase in capacity or a part of it.
- ✓ JK Ltd. worked at 60 per cent capacity for the first three months during the year 2008, but it is expected to work at 90 per cent capacity for the remaining nine months.

O ————————— 50% ————— 75% ————— 100%

560000 ₹

560000
+ 150000
—————
710000

560000
150000
150000
—————
860000
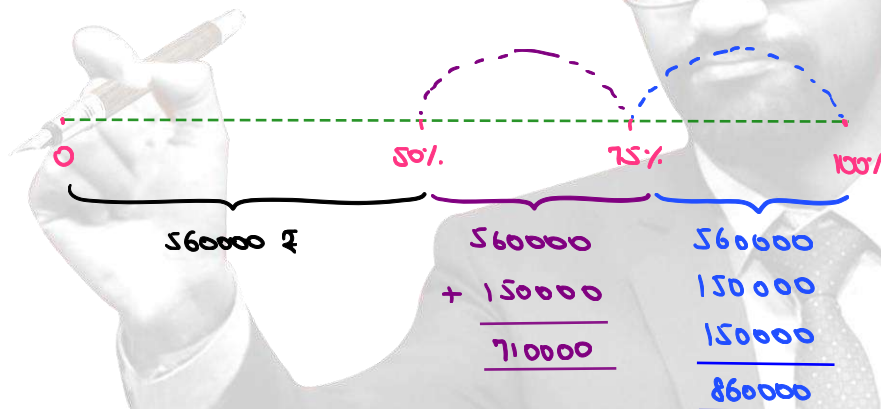
Semi - Variable Overheads

: for First 3 Months =

: for Next 9 Months =

CONCEPT	PREPARATION OF PRODUCT WISE COST SHEET IN CASE OF MULTI PRODUCT ORGANISATION

Multi Product means > 1 Product.

Production Ratio

Material Ratio

MATERIAL COSTING

CONCEPT	ECONOMIC ORDER QUANTITY

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

$$EOQ \ (₹) = EOQ \ (Units) \times Cost/Unit \ of \ RM$$

A = Annual Demand of Raw Material (Units)

O = Ordering Cost/ Order (₹)

C = Carrying cost/ Unit ?.a. (₹)

CONCEPT	NUMBER OF ORDERS

CONCEPT	ORDER FREQUENCY/ ORDER SCHEDULE/ TIME B/W 2 ORDERS

CONCEPT	COMPONENTS OF COST

Particulars	Relevant Cost/ Related Cost/ System Cost/ Variable Cost	Total Cost
Purchase Cost		
Ordering Cost		
Carrying Cost		

CONCEPT	COMPUTATION OF COST

Particulars	Formula
Purchase Cost	
Ordering Cost	
Carrying Cost	

CONCEPT	EOQ VS. NON EOQ (WITHOUT DISCOUNT)

Find EOQ first of all.

Particulars	EOQ	NON EOQ
Purchase Cost		
Ordering Cost		
Carrying Cost		

Extra Cost incurred by ordering Non EOQ/ Savings done by ordering EOQ =

CONCEPT	EOQ VS. NON EOQ (WITH DISCOUNT)

Find EOQ first of all.

Particulars	EOQ	NON EOQ
Purchase Cost		
Ordering Cost		
Carrying Cost		

CONCEPT	APPLICATION OF FORMULA OF "OC + CC"

| CONCEPT | | | PRICE BREAK | |

Particulars	1	2	3	4
Order Quantity				
Purchase Cost				
Ordering Cost				
Carrying Cost				

| CONCEPT | STOCK LEVELS |

Re-Order Level	✓ Maximum Consumption × Maximum Reorder Period or ✓ Safety Stock Level + (Normal Consumption × Normal Re-order Period)
Minimum Level	✓ Re-order level – (Normal Consumption × Normal Re-order Period)
Maximum Level	✓ Re-order Level + Reorder quantity - (Minimum Consumption × Minimum Re-order Period) OR ✓ EOQ + Safety Stock Level
Average Inventory Level	✓ Minimum level + $\frac{1}{2}$ Re-order quantity OR ✓ $\frac{\text{Maximum level + Minimum level}}{2}$
Danger Level	✓ Minimum/ Normal consumption × Maximum Re-order period for emergency purchases

✓ Consumption & Lead Time always go hand in hand.
✓ For danger level, if Maximum Re-order period for emergency purchases is not given, assume it to be less than minimum lead time.
✓ Normal/ average consumption   = $\frac{\text{Minimum Consumption + Maximum Consumption}}{2}$

✓ Normal/ average Reorder Period   = $\frac{\text{Minimum Reorder Period + Maximum Reorder Period}}{2}$

CONCEPT	MATERIAL TURNOVER RATIO & MATERIAL HOLDING PERIOD

It indicates the speed with which the material is consumed.

Material Turnover Ratio	Formula	$$\frac{\text{Cost of Raw Material Consumed}}{\text{Average Stock of Raw Material}}$$
	Cost of Raw Material Consumed	Opening stock of Raw Material + Purchases of Raw Material − closing stock of Raw Material
	Average Stock of Raw Material	$$\frac{\text{Opening stock of RM + closing stock of RM}}{2}$$
	Interpretation	
Material Holding Period	Formula	$$\frac{360 \text{ Days} / 52 \text{ weeks} / 12 \text{ Months}}{\text{Material T/o Ratio}}$$
	Interpretation	

CONCEPT	COMPUTATION OF MATERIAL COST

Inclusions	Purchase Price
	Custom Duty
	Freight
Exclusions	Trade Discount
	Quantity Discount
	Subsidy/ Grant
Special Points	Don't deduct cash discount
	Add Road Tax/ Toll Tax/ Entry Tax/ Octroi, if paid by buyer
	Don't add GST if credit is available
	Don't add Demurrage or Detention Charges

	In case of non-returnable containers, add the total cost
	In case of returnable containers, add the total cost of containers and then deduct the amount refunded by supplier at the time of return

CONCEPT — PURCHASE OF MORE THAN 1 MATERIAL IN SINGLE ORDER

Expense	Apportionment
Sales Tax	Apportion in the ratio of Invoice Price.
Freight	Apportion in the ratio of Purchase Quantity.
Octroi	Apportion in the ratio of Net Quantity Received.

CONCEPT — COMPUTATION OF STOCK RATE

Particulars	A	B	C
Quantity Purchased			
Less : Shortage etc.			
= Net Quantity Received			
Less : Provision for further deterioration			
= Effective Quantity			

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

CONCEPT — ABC (ALWAYS BETTER CONTROL)

Meaning	This system divides whole category of items in 3 parts – A, B & C, to exercise discriminating control over these categories of items based on their importance.			
Categorisation	Category	% of Total Value	% of Total Items	Control
	A	Huge investment Around 70%	Small Percentage Around 10%	Highest Degree of Control
	B	Moderate investment Around 20%	Moderate Percentage Around 20%	Moderate Degree of Control
	C	Least investment Around 10%	Least Percentage Around 70%	Least Degree of Control

Congratulates !

It's All India Rank Holders

THEY BELIEVED, THEY DID, SO CAN YOU

RSA — RAHUL SHIKHA ACADEMY — Quest For Excellence

AIR 3 #Kunal	AIR 4 #Arpita	AIR 4 #Utkarsh	AIR 6 #Mauj Arif
AIR 9 #Abhinav	AIR 9 #Jatin	AIR 10 #Zainul	AIR 16 #Kali
AIR 23 #Shubham	AIR 27 #Pari	AIR 32 #Mohnish	AIR 36 #Rhythm
AIR 38 #Naman	AIR 39 #Satakshi	AIR 40 #Sohan	AIR 47 #Aryan
AIR 47 #Mayank	AIR 47 #Rohini	AIR 48 #Daksh	AIR 49 #Neerav

CONCEPT	STORES LEDGER

It is maintained to keep a check on movement of materials.

Date	Receipts			Issues			Balances		
	Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt

Special Points	
Purchase of material at the rate, when such rate is already appearing in Balance Column	If such rate is appearing at the bottom in balance column, only then club the quantities.
Freight amount given along with Purchase Price	Add amount of freight in purchase price.
Transfer from 1 Job to Other Job	No effect.
Transfer from 1 Department to Other Department	No effect.
Return to Supplier	It will come in ISSUE Column. It will be entered at Same Rate, at which it was purchased
Return from Production to Stores	It will come in RECEIPTS Column.

Return from Production to Stores sub-table:

Qs Specifies Date of Issue	Value at the rate of issue of such date
Qs Doesn't Specify Date of Issue	Value at the rate of latest issue

If FIFO, write at the top in balance column.
If LIFO, write at the bottom in balance column.

CONCEPT	DIFFERENCE B/W BOOK & PHYSICAL QUANTITY

Book Qty > Physical Qty

Shortage

Treat as Issue

Abnormal loss

· Loss is to be taken to Costing P/L A/c

Book Qty < Physical Qty

Surplus

Treat as Receipt

Normal loss

· Loss is to be absorbed by good units

* It inflates the price of balance goods

LABOUR COSTING

CONCEPT	LABOUR TURNOVER RATIO

It is the rate of change in the composition of labour force of an organization.

Separation Method	$\dfrac{\text{Number of employees separated during the year}}{\text{Average number of employees on roll during the year}} \times 100$
Replacement method	$\dfrac{\text{Number of employees replaced during the year}}{\text{Average number of employees on roll during the year}} \times 100$
Flux method (Variant 1)	$\dfrac{\text{No. of emp. seperated} + \text{No. of emp. replaced during the year}}{\text{Average number of employees on roll during the year}} \times 100$
Flux method (Variant 2)	$\dfrac{\text{No. of emp. seperated} + \text{No. of accessions during the year}}{\text{Average number of employees on roll during the year}} \times 100$
Labour turnover due to new recruitment	$\dfrac{\text{Number of new employees joining during the year}}{\text{Average number of employees on roll during the year}} \times 100$
Labour turnover due to accessions	$\dfrac{\text{Number of accessions during the year}}{\text{Average number of employees on roll during the year}} \times 100$

Average no. of workers on roll = $\dfrac{\text{Workers in the beginning + Workers at the end}}{2}$

Computation of Workers at the End		
	Particulars	*Workers*
	Workers in the Beginning	
+	Workers Replaced	
+	Workers Recruited under Expansion	
-	Workers Separated	
	Workers at the end	

Equivalent Annual Labour Turnover Rate
$\dfrac{\text{Labour Turnover Rate Computed for the given period}}{\text{Days or Months in the given period}} \times 365/12$

If Question provides LTR itself

First of all, find average no. of workers
- If workers separated are given, apply separation method to find average no. of workers
- If workers replaced are given, apply replacement method to find average no. of workers

Impact of Labour Turnover

Given Cost	Computed Cost
Settlement Cost	Cost of Rectification
Recruitment Cost	Contribution Lost due to Unproductive Hours
Selection Cost	
Training Cost	

CONCEPT	COMPUTATION OF LABOUR HOUR RATE

Computation of Gross Wages, Labour Cost, Net Wages

Particulars	Amount
Basic Pay	
+ D.A.	
+ Leave Salary	
+ Bonus	
+ Canteen Subsidy	
GROSS WAGES	
+ E's Contribution to PF	
+ E's Contribution to ESI	
LABOUR COST	
- e's Contribution to PF	
- e's Contribution to ESI	
NET WAGES	

Computation of Effective Hours

Particulars	
Total Days Available	
- Leave Days	
- Holidays	
✗ Actual Days Worked	
Hours/ Day	

= Actual Hours Available	
- Normal Idle Time	

Computation Of Labour Hour Rate

CONCEPT	TWO BROAD METHODS OF PAYMENT

Time Rate

No. of Hours x Rate/ Hour

Piece Rate

No. of Pieces x Rate/ Piece

Straight Piece Rate

Differential Piece Rate

CONCEPT	COMPUTATION OF EFFICIENCY

Output Basis

$$\frac{Actual\ O/P}{Standard\ O/P} \times 100$$

Time Basis

$$\frac{Standard\ Time}{Actual\ Time} \times 100$$

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Subscribe YouTube channel **https://www.youtube.com/channel/UC0pn4J1gb2q4e98T-BX-Sng**

Cost, FM, Accounts, Advanced Account Lectures available at **www.carahulgarg.com**, (R.S.A.)

CONCEPT	PREMIUM BONUS PLANS

Halsey Plan
(Actual Time Taken × Time Rate) + 50% [Time saved × Time Rate]

Rowan Plan
(Actual Time Taken × Time Rate) + Time saved/ Time Allowed × [Actual Time × Time Rate]

Actual Time Taken = Actual Time for Actual Production

Standard Time/ Time Allowed = Standard Time for Actual Production
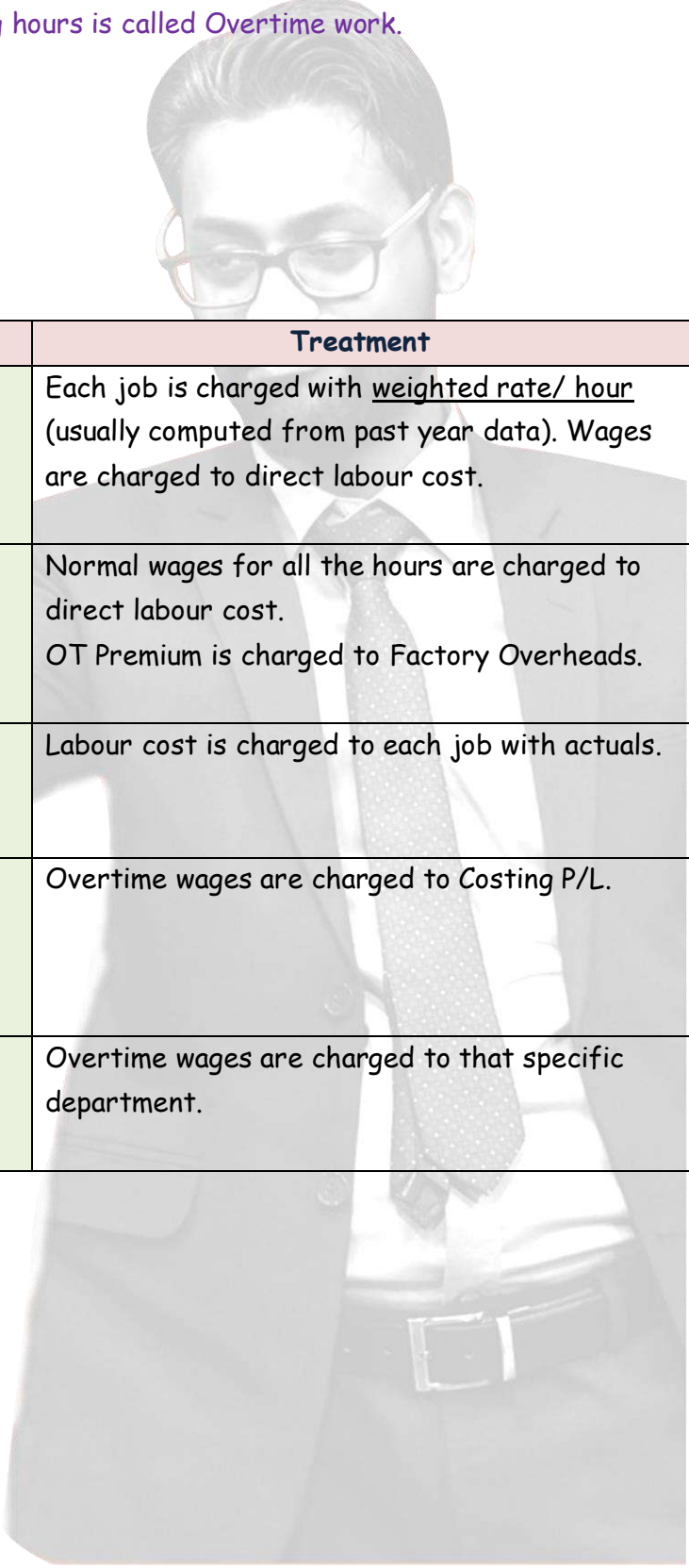
CONCEPT	TREATMENT OF IDLE TIME

It is the time during which worker is not working.

Normal Idle Time	Abnormal Idle Time
Unavoidable	Avoidable
Ex : Meals Break	Ex : Strike
Treated as cost of production	Transferred to Costing P/L
Wage rate is inflated.	

CONCEPT	TREATMENT OF OVERTIME

Work done by the worker beyond normal working hours is called Overtime work.

Circumstances	Treatment
When it is required regularly as a policy due to labour shortage	Each job is charged with weighted rate/ hour (usually computed from past year data). Wages are charged to direct labour cost.
When it is done to meet irregular production requirements	Normal wages for all the hours are charged to direct labour cost. OT Premium is charged to Factory Overheads.
When it is desired at customer's request to complete the work within specified time	Labour cost is charged to each job with actuals.
When it is required to make up any short fall in production due to abnormal conditions such as flood, earthquake etc.	Overtime wages are charged to Costing P/L.
When it can be attributed to the fault of any particular department	Overtime wages are charged to that specific department.

OVERHEADS

CONCEPT	UNDER OR OVER ABSORPTION OF OVERHEADS

Absorbed Overheads	Actual Base **x** Predetermined Overhead Recovery Rate
Actual Overheads	Given Amount – Adjustments (if any)

Actual O/Hs Vs. Absorbed O/Hs		
Under-Absorption	*Full-Absorption*	*Over-Absorption*
Actual Overheads **>** Absorbed Overheads	Actual Overheads **=** Absorbed Overheads	Actual Overheads **<** Absorbed Overheads

Treatment of Under/ Over Absorbed O/Hs	
Abnormal Reason	*Normal Reason*
Ex : Defective Planning	Ex : Increase in overhead costs
Transferred to Costing P/L	Find out supplementary rate and adjust Cost of Sales, Cost of Closing Stock of FG & WIP.

Costing P/L A/c

    To Factory on Control A/c

Cost of Sales   A/c

FG Control   A/c

WIP Control   A/c

    To Factory on control A/c

$$\text{Supplementary Rate} = \frac{\text{Under / over absorption due to normal reasons}}{\text{Equivalent Units Produced}}$$

CONCEPT	DISTRIBUTION OF OVERHEADS

Primary Summary	Secondary Summary
Allocation and apportionment of expenses for the first time amongst the - Production Departments & - Service Departments	Redistribution of Overheads of Service Departments, back over the Production Departments.

Format of Primary Summary					
Particulars	Basis	P1	P2	S1	S2
Direct Material	Given				
Direct Wages	Given				
Rent	Area				
Lighting	Light Points or Area				
Depreciation	Capital Value of Asset				
Insurance	Capital Value of Asset				
Maintenance	Machine Hours				
Power	HP of machines × Machine Hours				
Indirect Material	Direct Material				
Indirect Wages	Direct Wages				
Staff welfare	No. of employees				
Supervision	No. of employees				
Time keeping	No. of employees				
Sundries	Labour Hours or Machine Hours or Direct Wages				
Total					

Format of Secondary Summary					
Particulars	Basis	P1	P2	S1	S2
Total of primary Summary					
Distribution of S1 Overheads					

Distribution of S2 Overheads					
Total					

Methods of Secondary Summary

1.
Direct Method

2.
Step Ladder Method/ Step Distribution Method/ Non Reciprocal Method

3.
Reciprocal Method
- Repeated Distribution Method
- Simultaneous Equation Method

4.
Trial and Error Method
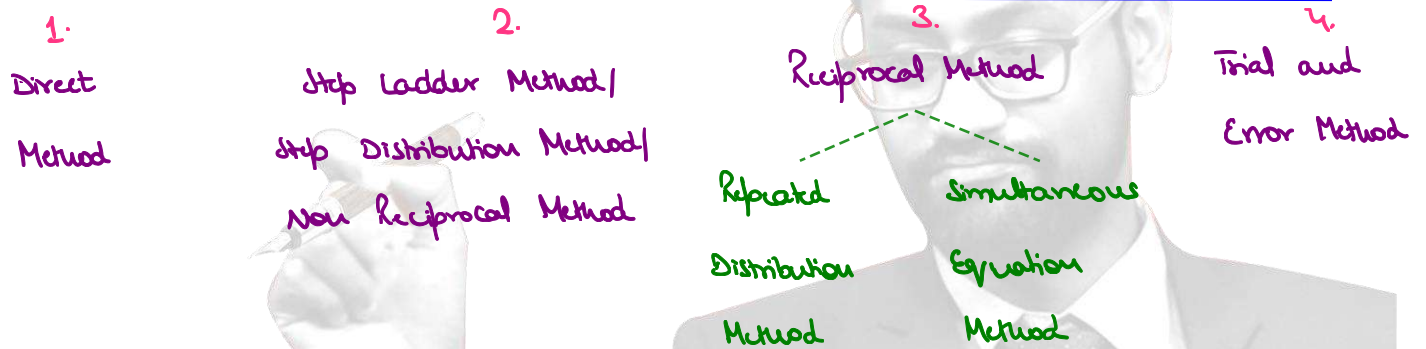
In silent cases, apply Reciprocal Method. However, if service departments are > 2, then apply Step Ladder Method.

Direct Method

Particulars	Basis	P1	P2	S1	S2
Total of primary Summary					
Distribution of S1 Overheads					
Distribution of S2 Overheads					
Total					

Step Ladder Method

Particulars	Basis	P1	P2	S1	S2	S3
Total of primary Summary						
Distribution of S1 Overheads						
Distribution of S2 Overheads						
Distribution of S3 Overheads						
Total						

Purpose is to get maximum distributions amongst the departments so we shall rank the Service Departments on the basis of "Extent of service provided to other departments". The service department providing the maximum service shall be given priority for distribution.

Example						
Particulars	Basis	P1	P2	S1	S2	S3
Distribution of S1 Overheads						
Distribution of S2 Overheads						
Distribution of S3 Overheads						

If we follow the same serial order						
Particulars	Basis	P1	P2	S1	S2	S3
Distribution of S1 Overheads						
Distribution of S2 Overheads						
Distribution of S3 Overheads						

If we rank SDs on the basis of "Extent of service provided to other departments"						
Particulars	Basis	P1	P2	S1	S2	S3
Distribution of S3 Overheads						
Distribution of S1 Overheads						
Distribution of S2 Overheads						

Repeated Distribution Method

Particulars	Basis	P1	P2	S1	S2
Total of primary Summary					
Distribution of S1 Overheads					
Distribution of S2 Overheads					
Distribution of S1 Overheads					
Distribution of S2 Overheads					
Distribution of S1 Overheads					
Distribution of S2 Overheads					
Total					

Simultaneous Equation Method

Let total overheads of S1 = x ₹
Let total overheads of S2 = y ₹

x = S1 own overheads + Share of S2 overheads
y = S2 own overheads + Share of S1 overheads

Example

Total of primary summary is as follows :

P_1	P_2	S_1	S_2
51,837	12,163	40,000	16,000

Basis of distribution is as follows :

	P_1	P_2	S_1	S_2
S_1	50%	40%	-	10%
S_2	30%	50%	20%	-

Prepare secondary summary as per Simultaneous Equation Method.

Solution

$x = 40000 + .20y$ . . . . . . (1)

$y = 16000 + .10x$ . . . . . . (2)

Solving equations (1) and (2)

$x = 44,082$

$y = 20,408$

Particulars	Basis	P1	P2	S1	S2
Total of Primary Summary		51,837	12,163	40,000	16,000
Distribution of S1 Overheads	50:40:-:10	22,041	17,633	(44,082)	4,408
Distribution of S2 Overheads	30:50:20:-	6,122	10,204	4,082	(20,408)
Total		80,000	40,000	Nil	Nil

Computation of Absorption Rate		
Particulars	P1	P2
Total of Secondary Summary (a)		
Direct Labour Hours (b)		
Overhead Rate/ Direct Labour Hour $[(a) \div (b)]$		

CONCEPT	MACHINE HOUR RATE

Machine hour rate denotes the cost of machine per hour.

Expenses related to Machine	
Standing Expenses	Machine Expenses
Depreciation (if based on time)	Depreciation (if based on activity)
Rent	Repairs
Lighting	Maintenance
Foreman Salary	Power
Indirect Wages	Fuel
Manager Salary	Electricity
Departmental Overhead	Consumable Stores

Statement Showing Machine Hour Rate			
S.No.	Particulars	Computation	Amount (₹)
A.	Standing Expenses		
1			
2			
3			
4			
	Total Standing Expenses (x)		
	Total Machine Hours (y)		
	Standing Expense/ Machine Hour	x / y	

B.	Machine Expenses		
1			
2			
3			
	Machine Expense/ Hour		
C.	Machine Hour Rate	A. + B.	

Effective Machine Hours		
Total Machine Hours available		
- Maintenance Hours		
- Set Up Hours (if unproductive)		

CONCEPT	COMPUTATION OF RECOVERY RATE

Recovery Rate/
Absorption Rate
$$= \frac{Overheads}{Base} \times 100$$

CONCEPT	DEPARTMENTAL RATE VS. BLANKET RATE

Blanket Rate	Departmental Rate
Single recovery rate for entire organization	Separate recovery rate for each department

BUDGETARY CONTROL

CONCEPT	CONTROL RATIOS or BUDGET RATIOS

These ratios provide information about the performance level i.e. whether the actual performance is favourable or unfavourable.

Efficiency Ratio	$\dfrac{\text{Standard Hours}}{\text{Actual Hours}} \times 100$
Activity Ratio	$\dfrac{\text{Standard Hours}}{\text{Budgeted Hours}} \times 100$
Capacity Ratio/ Actual usage of Budgeted Capacity Ratio	$\dfrac{\text{Actual Hours}}{\text{Budgeted Hours}} \times 100$

Important Relationship

Efficiency Ratio x Capacity Ratio = Activity Ratio

Meaning of Various Terms	
Budgeted Hours	Budgeted Hours for Budgeted Production
Actual Hours	Actual Hours for Actual Production
Standard Hours	Budgeted Hours for Actual Production

Example

	Units	Hours/ Unit
Actual	100	5
Budgeted	120	6

Solution

Budgeted Hours	
Actual Hours	
Standard Hours	

Some other formulas :

Calendar Ratio	$\dfrac{\text{Actual Working Days}}{\text{Budgeted Working Days}} \times 100$
Standard Capacity Usage Ratio	$\dfrac{\text{Budgeted Hours}}{\text{Max. Possible Hours in Budgeted Period}} \times 100$
Actual Capacity Usage Ratio	$\dfrac{\text{Actual Hours}}{\text{Max. Possible Hours in Budgeted Period}} \times 100$

CONCEPT	FLEXIBLE BUDGET

Under this, a series of budget are prepared, one for each alternate production level.

	Format of Flexible Budget					
S.No	**Particulars**	**1**	**2**	**3**	**4**	**5**
	Units					
A.	Sales					
B.	Cost					
1.	Fixed					
2.	Variable					
3.	Semi-Variable					
	Total (B)					
C.	Profit/ Loss (A - B)					

Categorization of Cost		
Fixed Cost	*Variable Cost*	*Semi Variable Cost*
It remains same at all the levels of output.	It varies with the output proportionately.	It varies with the output but not proportionately.

Principle of Change		
Fixed Cost	*Variable Cost*	*Semi Variable Cost*
Always changes in totality.	Always changes on per unit basis.	Change the fixed and variable proportions separately.

Segregation of Semi-Variable Cost

CONCEPT	FUNCTIONAL BUDGET

<u>When Question doesn't provide its pattern</u>

Production Budget		
Particulars	FP₁	FP₂
Target Sales		
+ Desired Closing Stock		
- Available Opening Stock		
= Production (Units)		

Raw Material Consumption (Usage) Budget		
Particulars	RM₁	RM₂
Finished Goods Production x Raw material Consumption per unit of FP		
= Consumption (Units)		

Raw Material Purchase Budget		
Particulars	*RM₁*	*RM₂*
Raw Material Consumption		
+ Desired Closing Stock		
- Available Opening Stock		
= Raw Material Purchase (Units)		
x Raw material Cost per unit		
= Raw Material Purchase (₹)		

<u>When Question provides its own pattern</u>

Production Budget				
Particulars	*Q₁*	*Q₂*	*Q₃*	*Q₄*
Sales				
80% of Sales of Current Quarter				
20% of Sales of Next Quarter				?
= Total Production (Units)				

As Question provides the opening stock at beginning of year and closing stock at the end of year, we can find the Total Production for the year as Sales + Closing Stock – Opening Stock

Production for Q_4 = Total Production for full year – Production of Q_1, Q_2, Q_3

Sometimes, the question may ask to purchase the Raw Material requirement in a particular proportion quarter wise. In such case, we shall find the annual requirement through the conventional formula Consumption of RM + Closing Stock of RM – Opening Stock of RM

Raw Material Purchase Budget				
Particulars	*Q₁*	*Q₂*	*Q₃*	*Q₄*
Purchase Quantity (Total Annual Requirement x Purchase %)				

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JOB & BATCH COSTING

CONCEPT	JOB COSTING

Meaning	Job Costing is that form of specific order costing under which each job is treated as a cost unit and costs are accumulated and ascertained separately for each job.
Applicability	When jobs are executed for different customers according to their specifications.
Using Recovery Rates	To charge the share of overheads on a job, recovery rates are used. *In the absence of any specific information, following are assumed* a. <u>Factory overheads are recovered as a % of direct wages</u> $$\frac{Factory\ OHs}{Direct\ Wages} \times 100$$ b. <u>Administration & Selling overheads are recovered as a % of works cost</u> $$\frac{Administration\ \&\ Selling\ OHs}{Works\ Cost} \times 100$$
Using Supplementary Rate	It is used when there is difference in Estimated and Actual figure i.e the amount of overhead charged earlier is less. Cost of job is increased by the use of supplementary rate.

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CONCEPT	BATCH COSTING

Meaning	The technique or method of estimation of batch cost is known as batch costing.
Applicability	The method of batch costing is applicable to those industries where production is done in bulk quantity at a time.
Example	Pharmaceutical or drug industries, ready-made garments, industries manufacturing electronic parts of T.V., radio sets etc.
Cost / Unit	$$\frac{Total\ Cost\ of\ Batch}{No\ of\ Units\ in\ Batch}$$

CONCEPT	ECONOMIC BATCH QUANTITY

Economic Batch Quantity refers to the optimum quantity which should be produced through one batch so that the Set up Costs & Carrying Costs are together optimized.

EBQ $= \sqrt{\dfrac{2 \times A \times S}{C}}$

A: Annual Production

S: Set Up Cost / batch

C: carrying cost / unit p.a.

No. of Batches/ Runs $= \dfrac{Annual\ Production}{EBQ}$

Time interval b/w 2 batches $= \dfrac{360\ Days\ /\ 52\ Weeks\ /\ 12\ Months}{No.\ of\ Batches}$

CONCEPT	COMPUTATION OF COST

Particulars	Formula
Set Up Cost	No. of batches/ runs x Set up cost/ batch
Carrying Cost	Average Inventory x Carrying Cost per unit p.a.

CONCEPT	EBQ VS. NON EBQ

Find EBQ.

Particulars	EBQ	NON EBQ
Set Up Cost		
Carrying Cost		

Extra Cost incurred by Non EBQ/ Savings possible by EBQ =

PROCESS COSTING

It's a method of costing used in the industries where the material has to pass through 2 or more processes for being converted into the final product.

A separate Process A/c is opened for each process.

| CONCEPT | | | SIMPLE PROCESS ACCOUNT | | |

Process I A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Material			By Process II A/c		
To Labour					
To Overheads					

Process II A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Process I			By Finished Stock A/c		
To Material					
To Labour					
To Overheads					

| CONCEPT | | | PROCESS ACCOUNT WITH GAINS & LOSSES | | |

Process I A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Material			Bu Normal Loss		
To Labour			By Abnormal Loss		
To Overheads			By Process II A/c or Finished Stock A/c		
To Other Expense					
To Abnormal Gain					

Cost per unit of Output / ABL / ABG = $\dfrac{\text{Total Cost of Process} - \text{Normal Loss Scrap}}{\text{Total Units Input in Process} - \text{Normal Loss Units}}$

CONCEPT	VALUATION OF PROCESS LOSSES & GAINS

Normal Loss	Abnormal Loss	Abnormal Gain
It is unavoidable loss.	It is avoidable loss.	It is unanticipated gain.
It is valued at scrap.	It is charged to Costing P/L.	It is credited to Costing P/L.

Example

Input = 100 units, normal loss = 5%

Actual output = 92 units	Actual output = 97 units

Normal Loss A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Process A/c			By Bank A/c		
			By Abnormal Gain A/c		

Abnormal Loss A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Process A/c			By Bank A/c		
			By Costing P/L A/c		

Abnormal Gain A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Normal Loss A/c			By Process A/c		
To Costing P/L A/c					

CONCEPT	SALE OF OUTPUT OF PROCESS

Process is not treated as Responsibility Centre	Process is treated as Responsibility Centre
Sale & Profit not to be shown in Process A/c but in Costing P/L A/c.	Sale & Profit is to be shown in Process A/c itself.

CONCEPT	INTER PROCESS PROFIT

Process I A/c

Particulars	Cost	Profit	Total	Particulars	Cost	Profit	Total
To Opening Stock				By Process II A/c			
To Direct Material							
To Direct 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							

Stock in process is valued at prime cost.

Finished stock is valued at the price at which it is received from process II.

Actual Realised Profits

Particulars	Process Profits (a)	Unrealised Profit in Opening Stock (b)	Unrealised Profit in Closing Stock (c)	Actual Realised Profits (a) + (b) – (c)
Process A				
Process B				
Process C				
Finished Stock				

Value of Closing Stock

Particulars	Closing Stock as Given in Question (a)	Unrealised Profit in Closing Stock (b)	Value of Closing Stock (a) – (b)
Process A			
Process B			
Process C			
Finished Stock			

CONCEPT	TREATMENT OF CLOSING WIP

Process I A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Material			By Normal Loss		
To Labour			By Abnormal Loss		
To Overheads			By Process II A/c or Finished Stock A/c		
To Abnormal Gain			By Closing WIP		

Statement of Equivalent Production

Input	Units	Output	Units	Material		Labour		Overheads	
				DOC	ECU	DOC	ECU	DOC	ECU
Material		Normal Loss							
		Abnormal Loss							
		Units Completed							
		Closing WIP							
		Abnormal Gain							

Statement of Cost

S. No.	Particulars	Cost	ECU	Cost/ ECU
1	Material			
2	Labour			
3	Overheads			

Statement of Valuation

1	Closing WIP		ECU x Cost / ECU	
		Material		
		Labour		
		Overhead		
2	ABL / Units completed		ECU x Cost / ECU	
		Material		
		Labour		
		Overhead		
		OR Units x Total Cost / ECU		

CONCEPT	TREATMENT OF OPENING WIP (FIFO METHOD)

FIFO Method can be applied only if DOC of opening WIP is available.

Process I A/c

Particulars	Units	Amount	Particulars	Units	Amount
To Opening WIP					

Statement of Equivalent Production

Input	Units	Output	Units	Material		Labour		Overheads	
				DOC	ECU	DOC	ECU	DOC	ECU
Op. WIP		Units Completed							
		: Opening WIP							
		: Current I/P							

Statement of Cost

S. No.	Particulars	Cost	ECU	Cost/ ECU
1	Material			
2	Labour			
3	Overheads			

Statement of Valuation

1	Units completed		
a.	Opening WIP Units		
i	Cost incurred in Previous Period	Given in Question	
ii	Cost incurred in Current Period	ECU x Cost / ECU	
		Material	
		Labour	
		Overhead	
b.	Current I/P Units	Units x Total Cost / ECU	

CONCEPT	TREATMENT OF OPENING WIP (WEIGHTED AVERAGE METHOD)

Weighted Average Method can be applied only if bifurcation of cost of opening WIP is available.

Process I A/c						
Particulars	Units	Amount	Particulars	Units	Amount
To Opening WIP					

Statement of Equivalent Production								
Input	Units	Output	Units	Material		Labour		Overheads	
				DOC	ECU	DOC	ECU	DOC	ECU
Op. WIP									

Statement of Cost						
S. No.	Particulars	Cost of Previous Period (a)	Cost of Current Period (b)	Total Cost (a) + (b)	ECU	Cost/ ECU
1	Material					
2	Labour					
3	Overheads					

Statement of Valuation

JOINT & BY PRODUCT

CONCEPT	BY PRODUCT

Meaning	By-products are products of relatively small value which emerges incidentally in the course of manufacturing the main product. These are secondary or subsidiary products.	
Accounting	*If sales value is small*	Sales value may be credited to P/L A/c, or Sales value may be deducted from total cost.
	If sales value is considerable	By-product may be treated as Joint Product.

CONCEPT	JOINT PRODUCT

Meaning	Joint products represent two or more products of almost equal importance which are produced in natural proportions simultaneously from the same material in the same process.
Options of sale	These products may be saleable without further processing or after further processing.
Examples	In Oil-refining industry, Gasoline, petrol, diesel, coal tar, kerosene etc. are joint products.
Meaning of Split off Point	Split off point or Separation point refers to that stage in the manufacturing process at which the products get separated and become separately identifiable.
Primary Issue	Since Joint costs cannot directly be allocated to individual products produced, there arises a problem of apportionment of joint costs amongst various products produced.

CONCEPT	PHYSICAL UNIT METHOD

Joint cost is apportioned amongst joint products in the ratio of physical units.

CONCEPT	SURVEY/ POINT VALUE METHOD

Joint cost is apportioned amongst joint products in the ratio of weight.

Weight = Units Produced x Points Allocated

CONCEPT	CONTRIBUTION MARGIN METHOD

Joint cost is apportioned amongst joint products as follows :

Variable Portion   – in the ratio of units

Fixed Portion   - in the ratio of contribution (Sales – Variable Cost)

CONCEPT	MARKET VALUE AT SEPARATION POINT METHOD

Joint cost is apportioned amongst joint products in the ratio of "Sales Value at Separation Point".

Sales Value at Separation Point = Units of JP at Separation Point x Selling Price at Separation Point

ICAI uses this method generally in silent cases.

CONCEPT	MARKET VALUE AFTER SEPARATION POINT METHOD

Joint cost is apportioned amongst joint products in the ratio of "Sales Value after Further Processing".

Sales Value after   =   Units of JP after   x Selling Price after
further processing   further processing   further processing

CONCEPT	NET REALISABLE VALUE METHOD

Joint cost is apportioned amongst joint products in the ratio of "Net Realisable Value".

Computation of NRV

Particulars	JP_1	JP_2	JP_3
Sales Value after further processing			
- Further Processing Cost			

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CONCEPT	REVERSE COST METHOD

Reverse Cost Sheet is to be prepared for all such products of which the profit percentage is given.

Particulars	JP$_1$	JP$_2$	JP$_3$
Sales Value after further processing			
- Estimated Profit			
= Cost of Sales			
- Selling & Distribution Expenses			
= Cost of Production			
- Administration Expenses			
= Factory Cost			
- Further Processing Cost			
= Balance/ Share in Joint Cost			

Share in Joint Cost (of the product of which profit % was not given)

Total Joint Cost
- Share in Joint Cost of all the products for which cost sheet was prepared

CONCEPT	COMPUTATION OF PROFITS

Computation of Profit (if sold at Split-off Point)

Sales Value at Separation Point
- Share in Joint Cost

Computation of Profit (if sold after further processing)

Sales Value after further processing
- Share in Joint Cost
- Further Processing Cost

CONCEPT	DECISION MAKING

Decision about further processing of JPs

Incremental Sales Value (Sales Value after further processing - Sales Value at Split Off Point)
- Incremental Cost (Further Processing Cost)
= Incremental Profit (if positive, process further)

STANDARD COSTING

CONCEPT	BASICS

Meaning of Standard	Standard means a criteria or yardstick, against which actual activity can be compared to determine the difference between the two.
Meaning of Standard Cost	Standard Cost is "what should have been" under the given set of operating conditions.
Variance	Variance represents the deviation of actual performance from the standard performance. It can be favourable or unfavourable.

CONCEPT	MATERIAL COST VARIANCES

STEPS	
M_1	Actual Cost of Materials 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 Qty of Input Consumed (in Standard Ratio) × Standard Material Cost/ Unit of Input
M_4	Standard Material Cost of Actual Production
	Actual Production × Standard Material Cost/ Unit of Output
	Budgeted Cost of Material Consumed
	Budgeted Qty of Input Consumed × Standard Material Cost/ Unit of Input

VARIANCE CHART

Material Cost Variance

- -

Material Price Variance   Material Usage Variance

- -

Material Mix   Material Yield

Variance   Variance

CONCEPT	MATERIAL COST VARIANCES (PRESENCE OF STOCK)

We will compute 1 additional variance i.e. Material Price Variance (at the time of purchase),

M_2 (Purchase) – M_1 (Purchase)

Where,

M_1 (Purchase) = Actual Qty of Input Purchased × Actual Material Cost/ Unit of Input

M_2 (Purchase) = Actual Qty of Input Purchased × Standard Material Cost/ Unit of Input

Rest, all the variances shall be computed as per consumption quantity.

M_1 (Consumption) = Value of Opening Stock + Value of Purchases – Value of Closing Stock

M_2 (Consumption) = Actual Qty of Input Consumed × Standard Material Cost/ Unit of Input

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CONCEPT	LABOUR COST VARIANCES

STEPS	
L_1	Actual Labour Cost incurred for Actual Time Paid for
	Actual time paid for × Actual Rate
L_2	Labour Cost incurred for Actual Time Paid for but at standard rate
	Actual time paid for × Standard Rate
L_3	Standard Labour Cost for Actual Time worked
	Actual time worked × Standard Rate
L_4	Standard Labour Cost if Actual Time worked is in Standard Ratio
	Actual time worked (in Standard Ratio) × Standard Rate
L_5	Standard Labour Cost of Actual Production
	Actual Production × Standard Labour Cost/ Unit of Output, or
	Standard Hours Produced × Standard Rate/ Hour
	Budgeted Cost of Labour
	Budgeted Hours × Standard Rate/ Hour

VARIANCE CHART

Labour Cost Variance

Labour Rate Variance   Labour Efficiency Variance

Labour Idle Time   Labour Mix   Labour Yield
Variance   Variance   Variance

CONCEPT	VARIABLE OVERHEAD VARIANCES

STEPS	
VO$_1$	Actual Variable Overheads Incurred
VO$_2$	Standard Variable Overheads for Actual Hours Worked
	Actual Hours Worked × Standard Variable Overhead Rate per Hour
VO$_3$	Standard Variable Overheads for Actual Output
	Actual Output × Standard Variable Overhead Rate per Unit of Output

VARIANCE CHART

Variable OH Cost Variance

Variable OH Expenditure Variance   Variable OH Efficiency Variance

CONCEPT	FIXED OVERHEAD VARIANCES

STEPS	
FO_1	Actual Fixed Overheads Incurred
FO_2	Budgeted Fixed Overheads
FO_3	Standard Fixed Overheads for Actual Days Worked
	Actual Days Worked × Standard Fixed Overhead per Day
FO_4	Standard Fixed Overheads for Actual Hours Worked
	Actual Hours Worked × Standard Fixed Overhead per Hour
FO_5	Standard Fixed Overheads for Actual Output
	Actual Output × Standard Fixed Overhead per Unit of Output

VARIANCE CHART

Fixed OH Cost Variance

Fixed OH Expenditure Variance   Fixed OH Volume Variance

Fixed OH Calendar Variance   Fixed OH Capacity Variance   Fixed OH Efficiency Variance

MARGINAL COSTING

CONCEPT	INCOME STATEMENT

Particulars	Amount
Sales	
- Variable Cost	
= Contribution	
- Fixed Cost	
= Profit	

CONCEPT	CONTRIBUTION

1. Sales – Variable Cost
2. Fixed Cost + Profit
3. Selling Price/ unit – Variable Cost/ unit = Contribution/ unit

CONCEPT	VARIABLE COST

1. Sales – Contribution
2. Selling Price/ unit – Contribution/ unit = Variable Cost/ unit

CONCEPT	CONTRIBUTION RATIO or P/V RATIO or VARIABLE PTOFIT RATIO or CONTRIBUTION TO SALES RATIO

If one set of data is given   If two set of data is given

| CONCEPT | BREAK EVEN POINT |

It is the point at which, there is no profit, no loss.

At this point, <u>Total Revenue = Total Cost</u>

i.e. Sales = Variable Cost + Fixed Cost

or, Sales - Variable Cost = Fixed Cost

i.e. Contribution = Fixed Cost

Units   ₹   %.

| CONCEPT | CASH BREAK EVEN POINT |

It considers only the cash portion of total fixed cost.

| CONCEPT | MARGIN OF SAFETY |

It is the level of sales beyond the Break-even point.

Units   ₹   %.

CONCEPT	SALES TO EARN DESIRED PROFIT

Units -- ?

CONCEPT	SHUT DOWN POINT

It indicates the minimum sales to be achieved to continue the business.

$$\text{Shut Down Point} = \frac{\text{Avoidable Fixed Cost}}{\text{Contribution/Unit (or) P/V Ratio}}$$

CONCEPT	COMBINED BEP

It is used when organization is selling > 1 product.

$$\text{Combined BEP} = \frac{\text{Total Fixed Cost}}{\text{Weighted Contribution/Unit}}$$

Computation of Weighted Contribution/Unit

Product	Contribution/Unit	Weight	Product

CONCEPT	KEY FACTOR

Anything which is in short supply, becomes the key factor ie. Requirement > Availability
In such situation, decision is taken on the basis of 'contribution per unit of key factor'.

Example

Particulars	A	B
Contribution/ unit	40	30
Labour Hours/ unit	3	7
Units	10,000	7,000

Labour hours are limited.

Solution

Particulars	A	B
Contribution/ unit	40	30
Contribution/ Labour Hour	40/ 3	30/ 7
	= 13.33	= 4.29
Rank	I	II

CONCEPT	DECISION AS TO PRODUCT MIX

Allocate the resources (key factor) to that product first, which is having top rank and then in descending order.

Example

Total labour hours available 51,000.

Solution

Particulars	A	B
Allocation of Labour Hours	10,000 × 3	51,000 – 30,000
	= 30,000	= 21,000
Production	30,000/ 3	21,000/ 7
	= 10,000	= 3,000

RECONCILIATION OF COST & FINANCIAL A/C

| CONCEPT | RECONCILIATION STATEMENT |

Particulars	Amount (₹)
Profit (Loss) as per Cost Accounting	
+ Incomes as per Financial Accounting only	
+ Profits as per Financial Accounting only	
- Expenses as per Financial Accounting only	
- Losses as per Financial Accounting only	
- Appropriations as per Financial Accounting only	
+ Over Recovery of Expense in Cost Accounting	
- Under Recovery of Expense in Cost Accounting	
+ Excess Valuation of Opening Stock in Cost Accounting	
- Excess Valuation of Closing Stock in Cost Accounting	
- Under Valuation of Opening Stock in Cost Accounting	
+ Under Valuation of Closing Stock in Cost Accounting	
+ Notional Expenses taken in Cost Accounting only	
= Profit (Loss) as per Financial Accounting	

CONCEPT	MEMORANDUM RECONCILIATION ACCOUNT

Particulars	Amount	Particulars	Amount
To Loss as per Cost A/c		By Profit as per Cost A/c	
To All the items of Reconciliation Statement having '-' sign		By All the items of Reconciliation Statement having '+' sign	
To Profit as per Financial A/c		By Loss as per Financial A/c	
	Total		Total

CONCEPT	TYPE OF SITUATIONS

TYPE I	TYPE II	TYPE III
Question provides the Profits of Financial A/c and Cost A/c, and also the items creating difference between the two.	Question provides the Profits of Financial A/c only	Question doesn't provide any profits
Prepare 1. Reconciliation statement or Memorandum Reconciliation A/c	Prepare 1. Cost Sheet to find profits of Cost A/c 2. Reconciliation statement or Memorandum Reconciliation A/c	Prepare 1. Trading and Profit Loss A/c to find profits of Financial A/c 2. Cost Sheet to find profits of Cost 3. Reconciliation statement or Memorandum Reconciliation A/c

INTEGRAL & NON-INTEGRAL SYSTEM

CONCEPT		BASICS

Non-Integral System	Integral System
It's a system of accounting under which 2 separate set of account books are maintained, one for the cost transactions and other for the financial transactions.	It's a system of accounting where both costing and financial transactions are recorded in the same set of books.

CONCEPT		JOURNAL ENTRIES

S.No.	Particulars	Journal Entry
1	Material	
a	Purchase	Stores Ledger Control A/c To General Ledger Adjustment A/c
b	Purchase Return	GLA A/c To SLC A/c
c	Normal Loss	Production O/H Control A/c To SLC A/c
d	Abnormal Loss	Costing P/L A/c To SLC A/c
e	Absorption of Direct Material	WIP Control A/c To SLC A/c
f	Absorption of Indirect Material	Production O/H Control A/c Admin. O/H Control A/c Sell & Dist. O/H Control A/c To SLC A/c
g	Return from Job/ Production	SLC A/c To WIP Control A/c
h	Material transferred b/w jobs	No entry
2	Wages	
a	Expense	Wages Control A/c

			To GLA A/c
	b	Absorption of Direct Wages	WIP Control A/c To Wages Control A/c
	c	Absorption of Indirect Wages	Production O/H Control A/c Admin. O/H Control A/c Sell & Dist. 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 Expense 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 Overheads	
	a	Expense	Admin. O/H Control A/c To GLA A/c
	b	Absorption	FG Control A/c To Admin. O/H Control A/c
7		Transfer of COGS	Cost of Sales A/c To FG Control A/c
8		Selling & Distribution Overheads	
	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 | Profit | Costing P/L A/c |
| | | To GLA A/c |

| 12 | Loss | GLA A/c |
| | | To Costing P/L A/c |

13	Under/ Over Recovery	
a	Under Recovery	Costing P/L A/c
		To _____ O/H Control A/c
b	Over Recovery	_____ O/H Control A/c
		To Costing P/L A/c

| CONCEPT | LEDGER ACCOUNTS |

Accounts having c/d	Accounts not having c/d
Stores Ledger Control A/c	Wages Control A/c
WIP Control A/c	Direct Expense Control A/c
FG Control A/c	Production O/H Control A/c
GLA A/c	Administration O/H Control A/c
	Selling & Distribution O/H Control A/c

However, if trial balance provided by question has any balance of such accounts, then we can maintain the balance in closing.

SERVICE COSTING

Service or operating costing is a method of ascertaining the costs of providing or operating a service. Example – Transport sector, hospital, hotel industry.

CONCEPT	PASSENGER KMS.

No. of Passengers x No. of Kms

(Seating Capacity x Occupancy %) (Kms/ trip x No. of trips/ day) x No. of days x No. of buses

CONCEPT	TONNE KMs.

No. of Tonnes x No. of Kms

Outward journey   :

Inward journey   :

Absolute Tonne Km	No. of tonnes carried x No. of Kms (Distance)
Commercial Tonne Km	Average tonnes carried x Total Kms (Distance)

CONCEPT	OTHER IMPORTANT COMPOSITE COST UNITS

Hotel Sector

No. of Room Days = No. of Rooms x No. of Days

Hospital Sector

No. of Patient Days = No. of Patients x No. of Days

	CONCEPT	OPERATING COST SHEET – TRANSPORT SECTOR	

S.No.	Particulars	Computation	Amount (₹)
A.	*Fixed Expenses*		
1	Driver Salary		
2	Cleaner Salary		
3	Garage Rent		
4	Insurance		
5	Depreciation		
6	Road Tax		
	Total (A)		
B.	*Variable Expenses*		
1	Fuel		
2	Tyres/ Oil/ Filter		
	Total (B)		
C.	*Semi Variable Expenses*		
1	Repairs & Maintenance		
	Total (C)		
D.	Total Operating Cost	A + B + C	
E.	Profit		
F.	Total Collection	D + E	

ACTIVITY BASED COSTING

CONCEPT		TRADITIONAL METHOD	

Particulars	P1	P2	P3
Direct Material			
Direct Labour			
Overheads			
Total			

A single base is taken to distribute the amount of overheads over various products.

CONCEPT		ABC METHOD	

Particulars	P1	P2	P3
Direct Material			
Direct Labour			
Overheads : Activity 1			
: Activity 2			
: Activity 3			
Total			

It attempts to break the amount of overheads into various distinct activities, then to find cost driver rate for each such activity and accordingly distributing overheads over various products activity wise.

CONCEPT		COST DRIVER RATE		

Activity	Cost Pool	Cost Driver	Cost Driver Capacity	Cost Driver Rate
a	b	c	D	e = b / d