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SUCCESS STORIES



CA. Jyoti Joon

Gurgaon Topper
(CA Final May 2013)
82 Marks in AMA
Highest in Gurgaon

Costing class by Mohit sir is best. He teaches in systematic and effective manner. He Clears concepts by explaining them deeply & by solving questions on every topic, which helps the students in scoring 80 plus in costing.



CA. Ankit
Singla

72 Marks in AMA
Highest in Gurgaon
(Nov. 2012)

Clearing both groups of CA Final in single sitting and scoring more than 70 in two subjects, specially 72 in Advanced Management Accounting was never so easy, but with a strong willpower and good guidance by Mohit sir and my parents has let it happen and today I am a qualified Chartered Accountant. Thanks a lot Sir.



CA. Deepak
Kumar

68 Marks in AMA
Second Highest in
Gurgaon
(May 2012)

Preparing for CA Finals with my job responsibilities was quite a difficult task for me. Teaching techniques used by Mohit Sir helped me a lot in understanding and retaining the concepts. His helpful and motivating behaviour also became a force in achieving my goal.



CMA. Dheer
Ambawata

63 in AMA (EPM)
And
70 in Financial
Reporting
(Dec. 2013)

Mohit Sir's style of teaching is Excellent. He is extremely friendly and motivating. Due to his continuous efforts and motivation I cleared my finals with good marks. Thanks to sir for his support and help.

STARS (FINAL)



CA Shruti Kohli



CA Md. Muzzammil



CA Khyati Joneja



CA Navita



CA Amitabh Pandey



CA Jatin Garg



CA Deepak Chutani



CA Surbhi Bhardwaj



CA Priyanka Goyal



CA Sarika Jain



CA Shambhavi



CMA Naveen Sehgal



CA Narender Jain



CA Charu Shridhar



CA Gaurav Gera



CA Gaurav Grover



CA Puneet Agrawal



CA Gaurav



CA Kaushal Jain



CA Surbhi Agrawal



CA Yukti Agarwal



CA Pareesh Govil



CA Ksitij Arora



CA Neha Nihara



CA Deepti Garg



CMA Dheer Ambawat



CA Prashant Tiwari



CMA Neeraj Rathee



CA Mukesh Parmar



CA Gaurav Ahuja



CA Naman Garg



CA Priyanshi Chaturvedi



CA Anshul Gautam



CA Sakshi Gambhir



CA Varun Jain



CA Suvidha Gupta



CA Naresh Gautam



CA Ashish Anand



CMA Preeti Yadav



NextE . You

MARKS OBTAINED BY OUR STAR PERFORMERS

CA. Jyoti Joon	82 Marks (AMA CA Final May 2013, highest in Gurgaon)
CA. Varun Jain	79 Marks (AMA CA Final May 2015)
CA. Naman Garg	77 Marks (Financial Reporting May 2016)
CA. Ankit Singla	72 Marks (AMA CA Final November 2012, highest in Gurgaon)
CMA Preeti Yadav	72 Marks (Strategic Cost Management CMA Final)
CMA. Dheer Ambawat	70 Marks (Financial Reporting; 63 Marks (EPM), CMA Final Dec. 2013)
Mr. Devesh Sekhri	70 Marks (Financial Reporting CA. Final May 2016)
CA. Paresh Govil	69 Marks (AMA CA Final May 2015)
CA. Surbhi Agarwal	69 Marks (AMA CA Final November 2014)
CA. Gaurav Ahuja	69 Marks (Financial Reporting CA Final November 2014)
CA. Deepak Kumar	66 Marks (AMA CA Final May 2012, Second highest in Gurgaon)
CA. Sakshi Gambhir	66 Marks (AMA CA Final May 2015)
CMA Neeraj Rathee	66 Marks (Strategic Cost Management CMA Final)
CA. Suvidha Gupta	65 Marks (AMA CA Final May 2015)
CA. Deepti Garg	65 Marks (AMA CA Final May 2015)
CA. Jatin Garg	64 Marks (AMA CA Final May 2014)
CA. Anshul Gautam	64 Marks (AMA CA Final November 2014)
CA. Charu Shridhar	63 Marks (AMA CA Final November 2014)
CA. Prashant Tiwari	63 Marks (AMA CA Final May 2015)
CA. Kshitij Arora	61 Marks (AMA CA Final May 2015)
Ms. Shivangi Gupta	61 Marks (AMA CA Final May 2015)
Mr. Anurag Verma	61 Marks (AMA CA Final May 2015)
CA.. Rinki Chauhan	60 Marks (Financial Reporting; AMA 58 Marks, May 2016)
CA. Puneet Agarwal	59 Marks (AMA CA Final May 2014)
Akeel Khan	75 Marks (Cost & Management Accounting, CMA inter December 2013)
Abhay Rustagi	72 Marks (Cost & Management Accounting, CMA inter June 2012)
Dheer Ambawat	68 Marks (Cost & Management Accounting, CMA inter June 2012)

Link for Demo Lectures:

https://www.youtube.com/watch?v=g_Mltz3Vvww

<https://www.youtube.com/watch?v=srjTK44QK7k>

ADVANCED MANAGEMENT ACCOUNTING

Solutions May 2017

C.A. Mohit Arora



SUGGESTED SOLUTIONS TO AMA

CA FINAL MAY 2017

SOLUTION: 1 (a)

STATEMENT SHOWING COST DIFFERENCE PER HOUR, RANKING AND PRODUCTION SCHEDULE

Particulars	A	B	C	Total
Total Variable Cost (Rs/u) (A)	187	215	111	100
Purchase Price (Rs/ u) (B)	280	N/A	161	
Cost Difference (Rs/u) (B) – (A) = (C)	93	∞	50	
Hours per unit (Machine Q – Key Factor) (D)	3	3	1	
Cost Difference per hour (C) ÷ (D) = (E)	31	∞	50	
Ranking	III	I	II	
Production Schedule (units) (F)	900	1,200	1,500	
Total Machine Hours (Machine Q – Key Factor) (D) X	2,700 (B.F.)	3,600	1,500	7,800

- (i) So Company should produce: 900 Units of 'A', 1,200 Units of 'B', and 1,500 Units of C and it can purchase 300 Units of 'A' (1,200 – 900) from Outside in order to minimize its total costs.
- (ii) If Sales price of the products were given in the Question then the production planning decision would be more accurate as, it is also very important to see that, if a certain product is earning profits even the same has been manufactured at lowest cost.
- If the products are not generating contribution, it would not be justifiable to sell them apart from the fact that they are being produced at lowest cost.

SOLUTION: 1 (b)

S. No.	Situation	RP/ EP/ MP	Pricing
(i)	Adjustable work table like a stool has been successfully capturing the market. Company X makes a small variant of this product and is trying to enter the market.	MP (Similar products are existing in the Competitive Market)	Competitive Pricing
(ii)	R & D has just been completed on an innovative computer processor in the shape of a pen, with accompanying pen-like devices to act as keyboard projector and monitor projector. This is expected to get the laptops out of the business due to extreme ease of portability of just 3 pen-like light weight devices.	RP (Altogether a New product not expecting competition very soon)	Skimming Pricing
(iii)	A successful mobile manufacturing company has built into its latest mobile phone, an additional sliding screen and improved its processor capabilities so that the phone is almost a laptop.	EP (Improved Product also not expecting competition very soon.)	Price Discrimination (Extra price for additional features)

SOLUTION: 1 (c)

STATEMENT SHOWING TARGET COST REDUCTION FOR BOTH PRODUCTS

Products	X	Y
Target Selling Price (Rs/u) (A)	8,000	9,000
Target P/V Ratio (B)	25%	30%
Target Contribution (Rs/u) (A) X (B) = (C)	2,000	2,700
Target Variable Cost (Rs/u) (A) – (C) = (D)	6,000	6,300
Current Variable Cost (Rs/u) (E)	7,500 {10,000 X (100% - 25%)}	8,400 {12,000 X (100% - 30%)}
Target Reduction in Variable Cost (Rs/u) (E) – (D) = (F)	1,500	2,100
Target BEP (Units) (G)	400	400
Target Specific Fixed Cost (C) X (G) = (H)	8,00,000	10,80,000
Current Specific Fixed Cost (I)	10,00,000	15,00,000
Target Reduction in Fixed Cost (Rs.) (I) – (H) = (J)	2,00,000	4,20,000

SOLUTION: 1 (d)

No, R1 C1 will never appear in the final solution under assignment algorithm.

According to the question Row minimum and Column minimum operations has already been done at this matrix. So here all we need to proceed, is only the line operations and it is clearly visible from the problem that only two lines can be drawn at this matrix (Besides R1 and Under C1), Which leads to improvement (No of Lines $\neq$ Order of Matrix i.e. $2 \neq 3$). Following are the steps of improvement to be applied in that case:

- Locate minimum value from uncovered cells. (Minimum of a, b, c, and d. Now let suppose it is 'a')
- Deduct it from the value of every uncovered cell. (i.e. $a - a = 0$; $b - a$; $c - a$; $d - a$)
- Add it to the value of cells at intersection of lines. (i.e. $C1R1 = 0 + a = a$)

Now we will be able to draw three lines and the solution will be the final solution and for this purpose we will select the cells having "0" values, hence C1R1 being a non zero element will never be there in final solution)

SOLUTION: 2 (a)

(i) STATEMENT SHOWING PRICE PER UNIT TO BE PAID FOR LOWER HALF

Particulars	Amount (Rs.)
Materials Cost (15 X 10)	150
Labour Cost	60
Total Variable Cost of Manufacture	210
Less: Transportation and handing Cost (Assumed to be payable by buyer)	(6)
Maximum Price to be paid p.u. if profit p.u. is required to be maintained	204

(ii) STATEMENT SHOWING PRICE PER UNIT TO BE PAID FOR LOWER HALF

Particulars	Amount (Rs.)
Materials Cost (15 X 10)	150
Labour Cost	60
Total Variable Cost of Manufacture	210
Transportation and handing Cost (Assumed to be payable by buyer)	6
Maximum Price to be paid p.u. if additional revenue is preferred	216

ABC Ltd. should purchase the lower half from the supplier and accept the entire order as this will increase the chances of earning high contribution.

SOLUTION: 2 (b)

STATEMENT SHOWING VARIOUS COMPUTATIONS

Activity	Duration (EFT – EST)	EST	EFT	LST	LFT (LST + Duration)	TF (LST – EST)	$\Delta C / \Delta T$
A	5	0	5	0	5	0	1,000
B	6	0	6	6	12	6	2,000
C	4	5	9	8	12	3	3,000
D	3	5	8	7	10	2	4,000
E	1	5	6	5	6	0	5,000
F	4	6	10	6	10	0	6,000
G	14	10	24	10	24	0	7,000
H	12	9	21	12	24	3	8,000
I	2	24	26	24	26	0	9,000

(i) Critical Path = A – E – F – G – I (As Total Float at Critical Path is always “0”),

So, Project Completion Time = 5 + 1 + 4 + 14 + 2 = 26 Days.

(ii) LFT as per table above: C = 12; D = 10; H = 24; and B = 12.

(iii)

Step	Crash Activity	Days	Cost
I	A	1	1,000
II	F	1	6,000
III	G	1	7,000

(iv)

Activity	Increase Duration By (Total Float after Crashing – Extra Days used by H)
B	2 Days (3 – 1)
C	0 Days (1 – 1)

Concept:

After Crashing total float at Activity B is reduced to 3 days; and the same for Activity C is reduced to 1 day and if 1 day float out of such float is used at Activity H which is an immediate successor to B and C; the float of both activities i.e. B & C will also reduce by 1 day each.

SOLUTION: 3 (a)

Working Notes:

Average hours/ unit for 250 Units

$$Y_{250} = 40 (250)^{\log 0.80 / \log 2}$$

$$\text{Or } Y_{250} = 40 (250)^{-0.322};$$

$$\text{Or } Y_{250} = 40 \times 0.1691;$$

$$\text{Or } Y_{250} = 6.764 \text{ hours}$$

Average hours/ unit for 249 Units

$$Y_{249} = 40 (249)^{\log 0.80 / \log 2}$$

$$\text{Or } Y_{249} = 40 (249)^{-0.322};$$

$$\text{Or } Y_{249} = 40 \times 0.1693$$

$$\text{Or } Y_{249} = 6.772 \text{ hours}$$

Standard hours for 250th unit = $[(250 \times 6.764) - (249 \times 6.772)] = 4.772$ hours.

(i) Standard hours for Actual output = $[(250 \times 6.764) + \{(1,000 - 250) \times 4.772\}] = 5270$ hours.

(ii) Labour Efficiency Variance(LEV) = (SH for AO - AH used) x SR
 $= [5,720 - 6,000] \times 96 = \text{Rs.}26,880 \text{ [A]}$

(iii) Labour Efficiency Variance(LEV) = (SH for AO - AH used) x SR
 $= [(40 \times 1,000) - 6,000] \times 96 = \text{Rs.}32,64,000 \text{ [F]}$

SOLUTION: 3 (b)

(i) Initial solution by Least Cost Method

Factory Destination	F1	F2	F3	Demand
D1	35 3	25 6	7	60/ 25 / 0
D2	8	30 5	7	30/ 0
D3	4	9	30 11	30 / 0
Supply	35/ 0	55 / 25 / 0	30 / 0	120

(ii) Since no of Rows + No. of columns – 1 $\neq$ No. of transportations

i.e. $(3 + 3) - 1 \neq 4$

So, This problem is not a Non degenerative problem. (Degeneracy exists here)

(iii) Matrix after removal of degeneracy with Δ_{ij} is given below:

Factory Destination	F1	F2	F3	U _i
D1	35 3	25 6	Δ_{13} - 3 7	0
D2	Δ_{21} 6 8	30 5	Δ_{23} - 2 7	- 1
D3	e 4	Δ_{32} 2 9	30 11	1
V _j	3	6	10	120

(iv) No we will get the same Δ_{ij} values, as Δ_{ij} values represent opportunity cost/ gain and this value will be same in all circumstances till the cost of transportation p.u. is revised.

(v) Initial solution by North West Corner Rule.

Factory Destination	F1	F2	F3	Demand
D1	35 3	25 6	7	60/ 25 / 0
D2	8	30 5	7	30/ 0
D3	4	9	30 11	30 / 0
Supply	35/ 0	55 / 30 / 0	30 / 0	120

SOLUTION: 4 (a)

(i) Production Budget

Products	Super	Normal
Sales (Tons)	200	80
Add: Closing stock	20	15
Less: Opening stock	(40)	(20)
Production (Tons)	180	75

(ii) Raw Materials Purchase Budget

Products	Super		Normal	
Production (Tons) (A)	180		75	
Raw Materials	Grade A	Grade B	Grade C	Grade D
Raw Materials Requirement (%) (B)	70	30	40	60
Raw Materials Requirement (Tons) (C) = (A) X (B)	126	54	30	45
Add: Closing stock	50	56	250.90	40.50
Less: Opening stock	(40)	(25)	(150)	(60)
Net Raw Materials Purchases (Tons) (D)	136	85	130.90	25.50
Add: Provision for Seasoning {(D) ÷ 85} X 15	24	15	23.10	4.50
Gross Raw Materials Purchases (Tons)	150	100	154	30

SOLUTION: 4 (b)

Working Notes:

Particulars	Budgeted	Actual
Raw Material Usage (Kg)	2,40,000 (28,80,000 ÷ 12)	3,30,000 (36,30,000 ÷ 11)
Labour Hours	4,80,000 (43,20,000 ÷ 9)	5,28,000 (52,80,000 ÷ 10)
Variable Overheads Per hour (Rs.)	15 (72,00,000 ÷ 4,80,000)	15.50 (81,84,000 ÷ 5,28,000)
Selling Price per unit (Rs.)	300 (1,80,00,000 ÷ 60,000)	325 (2,14,50,000 ÷ 66,000)
Variable Cost per unit (Rs.)	240 (1,44,00,000 ÷ 60,000)	259 (1,70,94,000 ÷ 66,000)
Margin (Contribution per unit) Rs.	60 (300 – 240) Standard Margin	85 (325 – 240) Actual Margin

- (i) Material Usage Variance = (SQ for AO – AQ used) X SP
 = [(2,40,000 ÷ 60,000) X 66,000] – 3,30,000 X 12
 = (2,64,000 – 3,30,000) X 12 = 7,92,000 A
- (ii) Material Price Variance = (SP – AP) X AQ used
 = (12 – 11) X 3,30,000 = 3,30,000 F
- (iii) Labour Efficiency Variance = (SH for AO – AH used) X SR
 = [(4,80,000 ÷ 60,000) X 66,000] – 5,28,000 X 9
 = (5,28,000 – 5,28,000) X 9 = Nil
- (iv) Labour Rate Variance = (SR – AR) X AH
 = (9 – 10) X 5,28,000 = 5,28,000 F
- (v) Variable Overhead Cost Variance = (SH for AO X SR) – (AH used X AR)
 = (4,80,000 X 15) – (5,28,000 X 15.50)
 = 72,00,000 – 81,84,000 = 9,84,000 A
- (vi) Sales Margin Volume Variance = (BQ – AQ) X Std. Margin
 = (60,000 – 66,000) X 60 = 3,60,000 F

SOLUTION: 5 (a)

Working Notes:

STATEMENT OF COST DRIVERS

Particulars	A		B	
	Before Cost Reduction	After Cost Reduction	Before Cost Reduction	After Cost Reduction
Output (number of units) (given)	10,000	15,000	10,000	15,000
No. of Production Runs	10 (given)	$7.50 \approx 8$ (15,000 ÷ 2,000)	10 (given)	12 (15,000 ÷ 1,250)
Set up Cost per Production Run (Rs.)	4,000 (40,000 ÷ 10)	4,000	7,500 (75,000 ÷ 10)	7,500
No. of Boxes Required	500 (60,000 ÷ 120)	500 (15,000 ÷ 30)	125 (25,000 ÷ 200)	120 (15,000 ÷ 125)
Distribution Cost per Box (Rs.)	120	120	200	200

(i) STATEMENT SHOWING COMPARATIVE PROFIT AFTER COST REDUCTION

Particulars	A	B
Production & Sales (Units)	15,000	15,000
Contribution per unit (Rs.)	40	50
Total Contribution	6,00,000	7,50,000
Overheads:		
Set up Costs	32,000 (8 X 4,000)	90,000 (12 X 7,500)
Distribution Cost	60,000 (500 X 120)	24,000 (120 X 200)
Step Cost	32,000 (4,000 for every 2,000 units)	75,000 (5,000 for every 1,000 units)
Unavoidable Fixed Cost	32,000	32,000
Total Overheads	1,56,000	2,21,000
Net Profit (Contribution – Overheads)	4,44,000	5,29,000

(ii) STATEMENT SHOWING BEP FOR PRODUCT "A" AT DIFFERENT ACTIVITY LEVELS

Production Units	1080	1110	1140
Unavoidable Fixed Cost	32,000	32,000	32,000
Set up Cost (Minimum 1 set up)	4,000	4,000	4,000
Distribution Cost	4,320 (1,080 ÷ 30) X 120	4,440 (1,110 ÷ 30) X 120	4,560 (1,080 ÷ 30) X 120
Step Cost (Minimum for 2,000 units)	4,000	4,000	4,000
Total (A)	44,320	44,440	44,560
BEP (A) ÷ 40	1108 units	1111 units	1114 units
Result	No BEP	No BEP	1 st BEP

So, Minimum BEP = 1114 Units

SOLUTION: 5 (b)

STATEMENT SHOWING TARGET COST PER TOY

Particulars	Amount
Target Selling Price p.u.	100
Less: Royalty payable p.u. @ 15%	(15)
Less: Target Profit @ 25%	(25)
Target Cost p.u.	60

STATEMENT SHOWING ACTUAL COST PER TOY

Particulars	Amount
Component A	8.50
Component B	7.00
Other Materials $[(0.6 \times 16) \div 96] \times 100$	10.00
Labour	24.00
Product Specific Overheads	13.50
Target Cost p.u.	63.00

As per the Statements above it is clear that the company is not able to achieve its Target Cost.
 Cost Reduction required = $63 - 60 = \text{Rs. } 3$ per unit.

SOLUTION: 6 (a)

Statement Showing Contribution, Ranking and Current Production Schedule Division 'A'

Particulars	AC	PC	Total
Selling price per unit (Rs.)	450	90	
Variable cost per unit (Rs.)	225	60	
Contribution per unit (Rs.)	225	30	
Hours required per unit	4	1	
Contribution per hour	56.25	30	
Ranking	I	II	
Production Schedule: Units	18,000	48,000	
Production Hours	72,000	48,000	1,20,000

Computation of Minimum Transfer Prices

Case	(i)	(ii)
Hours Available	1,20,000	1,20,000
Hours Used for Current Production	1,20,000	1,20,000
Idle Hours	Nil	Nil
Internal Transfer Quantity	12,000 units of AC	15,000 units of AC
Hours required for Internal Transfer	$12,000 \times 4 = 48,000$	$15,000 \times 4 = 60,000$
Opportunity Costs	14,40,000 $(48,000 \times 30)$	21,15,000 $[(48,000 \times 30) + (12,000 \times 56.25)]$
Opportunity Cost p.u.	120 $(14,40,000 \div 12,000)$	141 $(21,15,000 \div 15,000)$
Variable Costs p.u.	225	225
Minimum Transfer Price p.u.	345	366

(iii) Maximum Transfer Price (Division Y) = Market Price of Imported Component – Additional Processing Costs
 = ₹ 450 – ₹ 70 = ₹ 380 p.u.

Restriction on availability of Labour Hours will not have any impact on the solution, since total hours required for fulfilling external demand = 6,000 X (350 ÷ 35) = 60,000 hrs. only,
 And Total hours Available to Division = 6,00,000 Hours

(iv) & (v) Evaluation of Import Substitution from the point of view of Company

Particulars	Amount
Cost of buying Imported Component per unit (A)	450
Relevant Cost of making AC for RAC:	
Variable Cost p.u. (Division A)	225
Opportunity Cost p.u (Division A) [(6,000 X 4) X 30] ÷ 6,000]	120
Additional Variable Cost for modification (Division B)	70
Total Relevant Cost p.u. (B)	415

We can see in the statement above that Relevant Cost of manufacturing (Rs. 415) is less than the cost of buying (Rs. 450). So it is also better for the company to take transfer internally, rather than purchase from outside.
 Here also restriction on availability of Labour Hours in division "B" will not have any impact on the solution, under situation (iv) & (V), since total hours required for fulfilling external demand = 6,000 X (350 ÷ 35) = 60,000 hrs. only, And Total hours Available to Division = 6,00,000 Hours

SOLUTION: 6 (b)

(i) STATEMENT SHOWING CUSTOMERWISE PROFITABILITY

Particulars	A	B	C	D
No. of Pizzas	1,500	2,500	4,800	4,000
Contribution per Pizza (Rs.)	72	67	65	60
Total Contribution (Rs.) (X)	1,08,000	1,67,500	3,12,000	2,40,000
Normal Delivery Cost (Rs.)	40,000	75,000	3,20,000	1,00,000
	[(20 X 100) X 20]	[(30 X 125) X 20]	[(40 X 400) X 20]	[(25 X 200) X 20]
Rush Delivery Cost (Rs.)	---	8,000	4,000	6,000
		(40 X 200)	(20 X 200)	(30 X 200)
Total Delivery Cost (Rs.) (Y)	40,000	83,000	3,24,000	1,06,000
Net Profit (X) – (Y)	68,000	84,500	(12,000)	1,34,000

(ii) STATEMENT SHOWING REVISED CONTRIBUTION PER PIZZA FOR COLLEGE "A" ONLY

Particulars	A
No. of Pizzas (1,500 + 800)	2,300
Desired Contribution per Pizza (Rs.) [1,38,000 ÷ 2,300]	60
Total Contribution (Rs.) (X) = (Y) + (Z)	1,38,000
Normal Delivery Cost (Rs.) [(20 X 165) X 20]	66,000
Rush Delivery Cost (Rs.) (20 X 200)	4,000
Total Delivery Cost (Rs.) (Y)	70,000
Desired Net Profit (Z)	68,000

So, Maximum Discount to be Offered per Pizza = 72 – 60 = Rs.12

SOLUTION: 7 (a)

- (i) + M will be the coefficient of Artificial Variables in the Objective Function in a Minimisation Problem. As we know Artificial Variables do not have any Actual Existence. These variables are introduced for the purpose starting the question properly. The objective of putting + M as a coefficient of Artificial Variable, is to restrict the presence of Artificial Variables in Final Solution as 'M' represents infinity and '+ M' will show that the existence of Artificial Variable in final solution can increase the cost up to infinity.
- (ii) No any type of surplus variable cannot be the part of Initial Solution as Surplus Variables are always introduced in More than & Equal to restrictions, to convert them into Equal to restriction. Initially Surplus Variables always have '- sign'. Hence they cannot be taken as a part of Initial Solution, as they break Non – Negative restrictions of a Linear Programming Problem. That's why Artificial Variables are introduced always with surplus variables to start the question with '+ sign'.

SOLUTION: 7 (b)

FREQUENCY TABLE

c	Particulars	No. of Items (Frequency)	% Frequency
1.	End Frame not equidistant from the centre	10	3.33
2.	Non-uniform grinding of lenses	60	20.00
3.	Power mismatches	20	6.67
4.	Scratches on the surface	110	36.67
5.	Spots/ Stains on lenses	5	1.67
6.	Rough edges of lenses	70	23.33
7.	Frame colors-shade differences	25	8.33
	Total	300	100

Focus Areas are:

- (i) Non-uniform grinding of lenses
 (ii) Scratches on the surface
 (iii) Rough edges of lenses
 (iv) Frame colors-shade differences

SOLUTION: 7 (c)

Throughput Contribution	Operating Costs	Investments
Raw Materials used for production Sales	Rent/ Utilities Depreciation Labour Costs	Research & Development Cost Stock of Raw Materials Cost of Equipments & Buildings

SOLUTION: 7 (d)

- (i) Yes, it is very necessary to identify the principal budget factor before starting the preparation of functional budgets. Since in every organization there is some factor that restricts the performance for a given period, this factor is called as principal budget factor. In the majority of organizations this factor is sales demand. The early identification of this factor is very important in any organization because it helps in identification of the flow of budgeting i.e. which budget is to be prepared first.

- (ii) Yes, as we know that flexible production cost budget is prepared at various levels of activities. It shows the nature and behavior of different elements of costs at various activity levels. If we prepare flexible budget in advance it will help us in understanding the nature and behavior of different elements of cost, this will in return helps us in effective planning, meaningful allocation of resources, in deciding the nature and extent of control to be adopted for various elements. If flexible budgets are prepared at different activity levels it will also help in monitoring the actual performance, so that corrective actions can be taken in timely manner.

SOLUTION: 7 (e)

S.No.	Particulars	Type
(i)	R & D Costs	Sunk Cost, Historical Cost
(ii)	Cost of Market Survey	Sunk Cost, Historical Cost
(iii)	Profit of Telephone Instruments Division	Relevant Cost, Notional Cost

THE END

You can clear your doubts at:
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Best Of Luck!