

Total Marks:49

Your overall performance is good. Revise all your previous topics at least once in a week rather allocate a day in a week for revision and evaluating your performance. This will help you memorize topics and bind out shortcomings in your preparation.

Costing Test -4.

2014

Wednesday 13

A1	Absorption costing	Activity based costing
Basis:	In absorption costing cost is allocated on the volume of production.	In activity based costing cost is allocated on the basis of cost driver used by the respective department.
Suitability	It is suitable for organisation having large volume of similar product.	It is more suitable for organisation having differentiated products.
Cost	All cost are allocated by absorption costing.	All relevant cost will be allocated using absorption cost. if cost used by the activity.

- Examples: 1) All production overhead will be allocated to both Keyboard & Pians division irrespective of the usage by the department.
- 2) Cost will be allocated on the basis of activity used by department. Space maintenance cost for sub-continents is only used by Pians will be only allocated to Pians department.

14

AUGUST

THURSDAY

WEEK 33 / DAY 226-139

2014

AUGUST

Wk	M	T	W	T	F	S
31						
32	4	5	6	7	8	
33	11	12	13	14	15	
34	18	19	20	21	22	
35	25	26	27	28	29	

Benefit/

Absorption Costing
It gives ~~mis-~~
allocates absorption
rate of activity in
case of very large
operations.

Activity Based Costing
It gives a
clear picture
regarding cost
as resources
are allocated
based on usage
of activity.

(ii) Steps in implementation of activity
Based Costing :-

1) Identify major activities of the
organisation

2) Find cost pool:- Identify the cost
related to such cost driver and
activities

3) Identify cost driver:- Determine the
basis on which the cost is
being utilised. For ex. for
electricity expense cost driver
will be amount or unit
of activity electricity used.

4) Calculate the rate of activity:- Determine
the rate based on cost driver
on which such cost is
to be allocated to activities.

15 FRIDAY

SEPTEMBER 2014						
M	T	W	T	F	S	S
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15	16	17	18	19	20	21
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29	30					

AUGUST

SATURDAY

2014

WEEK 33 / DAY 228-137

16

- 5) Charge cost to activity :- Cost is charged to the activity on the basis of scale determined for each cost.
- (iii) Activity Based costing will be suitable for Piano and keyboard division as there is high level of customisation. And also,
- It will help in identifying actual profit from the division.
 - It will allocate cost only on the basis of usage of such cost by the activity.
 - It will help in identifying customer who are more profitable on the basis of correct cost or cost based on activity is allocated to each customer.
 - It will help in identifying areas of improvements. It will help in identifying cost area of to which which do not add value to customer.

SUNDAY

17

18

AUGUST

MONDAY

WEEK 34 / DAY 230-135

2014

AUGUST						
Wk	M	T	W	T	F	S
31						
32	4	5	6	7		
33	11	12	13	14		
34	18	19	20	21		
35	25	26	27	28		

24

Activity Based Costing will most
be appropriate for Pt Keyboard
division as it manufacture
similar kind of product.

Also ABC costing is a time consuming
and costly to implement.

(iv) Activity Based Management - provides
framework for estimating the
amount of resources required for
an activity.

(ABM)

It can help in improvement in
business performance as follows:-

a) Increase in profitability :-

With the help of ABM management
can identify divisions making
more profit & for e.g. ~~Piano~~
Keyboard division is making
more profit than Piano division.
Hence Melody can focus on
improving Keyboard division.

b) Identification of non-value
adding cost of division :-

With the help of ABM, management

SEPTEMBER 2014						
S	M	T	W	T	F	S
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29	30					

AUGUST
TUESDAY
2014 WEEK 34 / DAY 230-234 5 19

will be able to identify cost with more absorption rates allocated to a division or cost which is incurred only for one division.

Management can find ways to reduce the cost or share the cost with different activities.

(i) Performance Measurement :- ABM can also become a tool of performance measurement.

Different cost drivers pools can be compared on the basis of value provided to customers.

Also management, employees and staff can be evaluated based on their ~~performer~~ performance.

In cost management and reduction in respective activities.

20

AUGUST
WEDNESDAY

WEEK 34 / DAY 232-133

2014

AUGUST				
Wk	M	T	W	F
31				
32	4	5	6	7
33	11	12	13	14
34	18	19	20	21
35	25	26	27	28

10 marks

6

Q2 (i)

Division X

External

TO Y

Selling Price

50

50

Division Y

External

180

(i) Variable cost.

Material

12

12

22

Labour.

16

18

13

M/f OH

2

2

5

Selling & Dist

4

-

2

you have good concept understanding of this question. work on presentation. 100

Contribution.

16

20

38.

Units.

269000

240,000

120,000

Profit **avoid cutting.**

4160,000

148,09,000

5760,00,00.

Total Profit

4720,000

Total Contribution.

4160,000

1460,000

9560,000

19 Total Contribution

Division X

8960,000

Division Y

4560,000

20 FC

40,00,000

90,00,000

Profit

4960,000

2860,000

Total Profit =

7520,000

SEPTEMBER 2014
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 29 30

AUGUST
 THURSDAY
 2014
 WEEK 34 / DAY 233-132

21

(ii) If division Y accept the offer of New supplier.

	Division X	Division Y
SP	50	180
DV variable cost		
Material	12	22
Labour	16	13
Mcf OH	2	5
Selling Cost	4	2
Component Gex		94
Contribution / unit	16	44
Units	300,000	120,000
Total Contra	48,00,000	52,80,000
MPU	40,00,000	20,00,000
Profit	800,000	32,80,000
Total Profit	4080,000	

Decrease in group profit due to Division Y accepting order from outside supplier = ₹ 3444,000

$$(\text{₹} 682000 - 4080,000)$$

Continued at Pg. 10.

22

AUGUST

FRIDAY

WEEK 34 / DAY 234-131

2014

AUGUST						
Wk	M	T	W	T	F	S
31						
32		4	5	6	7	
33	11	12	13	14		
34	18	19	20	21		
35	25	26	27	28		

(iii) Top management should intervene to promote goal congruency in the organisation.

As division Y accepted the order from outside supplier profit was reduced by £ 3440,000 although Division Y showed increase of profit of £ 720,000 (32,80000 - 25,60,000)

Top management should encourage managers of Division X for internal transfer of product Gex.

Transfer price of product Gex can be calculated as follows:-
Selling Price of Outside Customer
= Cost reduction + Benefits achieved.

Division X saves £ 4 per unit as selling and distribution cost on internal transfers.

Hence Transfer price should be
= £ 50 - 4
= £ 46 / unit

It can also be seen in calculated as follows:-

SEPTEMBER 2014						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

AUGUST

SATURDAY

2014

WEEK 34 / DAY 235-130

23

9

= Marginal cost + Benefits lost.

Marginal cost of producing Gas for internal transfer is £ 30 ($12+16+2$).

Further to transfer Gas to Division Y is Division X has to forego 40,000 Sales to outside customer, on which it loses FVA contribution of £ 16 / unit.

Hence for maximum minimum Transfer Price should be = $(30+16) \times 46$.

Further Maximum Transfer price can be calculated as follows:

$$\begin{aligned} &= \text{SP of Division Y} - \text{Marginal Cost} \\ &= 140 - 42 \\ &= 138. \end{aligned}$$

This is for 2 units of Gas. So Transfer price per 1 unit will be £ 69/unit.

Also External Buying price is £ 47/unit

SUNDAY

24

∴ No division Y will pay £ 47/unit for Gas.

Hence Range for transfer price will be £ 46-47/unit for Gas.

25

AUGUST
MONDAY

WEEK 35 / DAY 237-128 2014

10

AUGUST						
SUN	MON	TUE	WED	THU	FRI	SAT
31						
32	4	5	6	7		
33	11	12	13	14		
34	18	19	20	21	22	
35	25	26	27	28	29	

As the marginal cost of material G, exp is only £30 i.e less than minimum transfer price. Organisation should ensure that it is produced and transferred internally.

(ii) Analysis of Profitability:

1. Group profit decrease by £ 344,000

2. Profit of Division X decrease by £ 41,60,000

3. Profit of Division Y increases by £ 720,000.

Reason for major decrease of profit is reduction in sale of 200000 units of Division X which were first transferred to Division Y.

SEPTEMBER 2014						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

AUGUST
TUESDAY
2014
WEEK 35 / DAY 238-127

26

10 marks

(Q3) Transfer Price in various situations.

→ Situation I.

Transfer Price will be

= Cost to be incurred + Contribution lost.

A) Cost to be incurred to transfer 10,000 kg of pulp is £ 126 / kg.

(B) Contribution lost is equal to the contribution lost on sales of 10000 units divided by no. of units sold

$$= \frac{84 \times 10000}{10000}$$

Transfer Price = Marginal cost +

Contribution lost on 6/F no. of units

$$= 126 + \frac{84 \times 10000}{1000}$$

? £210

Manager of pulp division will not transfer the pulp in less than £ 210 / kg.

27

AUGUST

WEDNESDAY

WEEK 35 / DAY 239-126] 2014

AUGUST						
Wk	M	T	W	T	F	S
31						
32	4	5	6	7	8	
33	11	12	13	14	15	
34	18	19	20	21	22	
35	25	26	27	28	29	

Manager of Cartoon division can procure pulp from outside market at ₹ 189/kg. and will not pay ₹ 210/kg to pulp division and hence transfer is not possible.

Situation II

Transfer price will be as follows:

$$\begin{aligned}
 &= \text{Marginal cost} + \text{Contribution cost} \\
 &= 126 + 0 \\
 &= ₹ 126
 \end{aligned}$$

As pulp division can only sell 60,000 units to outside customer 40,000 units is idle.

And hence contribution cost will be zero.

In this situation, minimum transfer price will be ₹ 126 and maximum transfer price will be ₹ 186, i.e. at rate on which cartoon division can procure pulp from outside customer.

SEPTEMBER 2014						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

AUGUST
THURSDAY
2014
WEEK 35 / DAY 240-125

28

13

Hence any transfer price between the exchange will be profitable to the organisation.

Situation III

If the outside supplier reduces the price to £177 the pulp division will be able to meet the price as marginal cost is only £126 provided there is still idle capacity mentioned in situation II.

If pulp division does not meet the price of £177 group profitability is as follows.

Supplier	
Price by outside firm	£177
Marginal cost	£126
Difference	£1
No. of units	10,000
Total loss to organisation	£10,000.

Hence if cartoon division accepts order from outside supplier the group will lose £10,000 of profits.

AUGUST

Wk	M	T	W	T	F	S
31						
32	4	5	6	7	8	9
33	11	12	13	14	15	16
34	18	19	20	21	22	23
35	25	26	27	28	29	30

29

AUGUST

FRIDAY

WEEK 35 / DAY 241-124

2014

10 marks

Q4 Total cost of material A to Department B & C under different option.

Option I, Production

Procure at Market price £15

Option II For division B it has to

you did this question accurately.

use so maximum price

Division B can pay is £15 - 2)

£13

Option III For division C

(i) procure from outside at £15 and transfer £3

As inspection cost

£18.

(ii) Get material inspected at £2.

£17

(iii) Use idle capacity of Division A at £1

£16

If can be observed that maximum transfer price will be £13. Division A will be able to agree on this transfer price as it has marginal cost of £7 only.

SEPTEMBER 2014						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

AUGUST
SATURDAY
2014 WEEK 35 / DAY 242-123
30
15

Statement showing contribution £ unit

Particular	Division A Outside Intend.	B	C.
Direct Material	9	15	20
Direct Labour	2	3	4
Variable OH	1	1	1
Total	12	19	25
Transfer Price Modification		13	13
Total Cost	7	32	38
Selling Price	15	13	50
Contribution	8	6	12

Statement showing decision relation to expansion of capacity.

Particular	A	B	C
Existing Capacity	£0000*	2500	2500
Additional Capacity	5000	1210	2250
Total	10,000	3750	5000
External demand	3750	5000	4000
Additional FC	24000	6000	18750
Additional units to be sold after expense	21000/6	6000/6	18250/16
Decision	Expand	Expand	Do Not Expand

MEMBER	2014					
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

SEPTEMBER

TUESDAY

2014

WEEK 36 / DAY 245-120

02
6

Decision :

A

B

C

Make 10000 37500 2500.
T.F. 6250.

Statement Summarizing Profitability

Particulars	A	B	C
SP	15	13	10
VC	7	7	5
Contribution	8	6	5
Units	3750	3750	2500
Total Contribution	30000	37500	22500
	120,000	120,000	30000

$$\begin{aligned} \text{Total Profit} &= 244750 - \text{Fixed cost} \\ &= 244750 - 120,000 - 30000 \\ &= 90,000. \end{aligned}$$

Computation of Best Strategy for Co.

For Best strategy Division A should transfer A at T.F i.e Variable cost.

Also Company should transfer maximum to division C as it offers more contribution per unit.

03

SEPTEMBER
WEDNESDAY

WEEK 36 / DAY 246-119

2014

Wk	M	T	W	T	F	S
36	1	2	3	4	5	6
37	8	9	10	11	12	13
38	15	16	17	18	19	20
39	22	23	24	25	26	27
40	29	30				

10 marks

Q5

08 (a) Statement showing Cost as per activity Based costing.

Particulars

	P	Q	Total
- Direct material	4100	3000	7200
Labour Cost	1500	1000	2500
Machining Cost	700	550	1250
Machine Setup cost (WM1)	210	252	462
Testing Cost (WM2)	1250	1125	2375
Congn'eeiy cost (WM3)	840	1410	2250
Total Cost	8700	7337	16037

you have done this question correctly.

(WM1) - Machine Set up cost

Particulars

Total Output	100000	50000	
Output per Batch	1000	500	
No. of Batch	100	100	
Time per batch	30	36	
Total hours	3000	3600	6600
Rate (162/- to 600)	40	70	
Cost allocation	210	252	

OCTOBER 2014						
SUN	MON	TUE	WED	THU	FRI	SAT
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SEPTEMBER

THURSDAY

2014 [WEEK 16 / DAY 27-118]

04

18

Total.

WN2 Testing Cost.

P

Q

Particular	Value	Q	Q
Total Output	100000	50000	
Time per Unit	5	9	
Total hour	500000	450000	450000
Rate	2.5	2.5	
Cost allocation	1250	1125	

WN3 Engineering Cost

It is given that actual cost of engineering on each product is allocated on actual basis.

(b) Mark up on Full Cost of P.

Selling price	100.05
F.C. Cost	87
Mark up	13.05

(c) New Markup Target Price.

New Selling Price	96.25
→ Mark up	13.05
Target Price	73.2

05

SEPTEMBER

FRIDAY

WEEK 36 / DAY 248-117 2014

SEPTEMBER						
Wk	M	T	W	T	F	S
36	1	2	3	4	5	6
37	8	9	10	11	12	13
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(d)

Statement showing Revised cost

12'00

	Original	modification	Revised
Direct Material	4200	500	3700
Direct labour	1500	200	1300
Machining cost	700	-	700
Machine set up	210	14d	196
cost			
Testing cost	1250	250	1000
Engineering cost	840	-	840
Total cost	6700	1090	2736

Target cost is ✓ 2736.

The company will not be able to meet the target cost

(e) Possible management actions are as follows

(i) Value chain analysis. To identify non-value adding activity and eliminate it.

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18	19	20	21	22	23
24	25	26	27	28	29
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SEPTEMBER

SATURDAY

2014

WEEK 36 / DAY 249-116

06

20

- (iv) Time and motion study to reduce cost of the product
- (iii) Implement JIT system to reduce the cost over a long period of time.
- (iv) Explore possibility of cost reduction and try to implement them.
- (v) Entity can also look into business process Re-engineering to reduce the cost drastically but the same will be costly and time taking.

SUNDAY

07