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SUGGESTED SOLUTION

FINAL May 2019 EXAM

SUBJECT- AMA

Test Code – FNJ 7038

BRANCH - () (Date :)

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Answer 1:

(A)

Statement Showing Manufacturing Cost and Buying Cost

(Rs. in lakhs)

Year	Present Value Factor @ 10%	When the Component is Manufactured		When the Component is Bought	
		Cash Outflows	Present Value of Cash Outflows	Cash Outflows (Cost of Buying)	Present Value of Cash Outflows
0	1.000	4	4.000	-	-
1	0.909	6+2	7.272	9	8.181
2	0.826	7+2	7.434	10	8.260
3	0.751	8+2	7.510	11	8.261
4	0.683	10+2	8.196	14	9.562
			34.412		34.264

Cash Outflows* means Capital Cost *plus* Manufacturing Cost *plus* Opportunity Cost.

The above statement shows that there is a saving in buying the component amounting to Rs.0.148 lakh (i.e. Rs. 34.412 lakhs – 34.264 lakhs).

Hence, it is beneficial to buy the component from outside.

Note: It may be noted that the loss of Rs. 2 lakhs of cash inflow for each of the 4 years due to inability of the firm to operate another machine when it manufactures the component has to be treated as an opportunity cost.

(B)

Workings

Statement Showing Variable Manufacturing Cost *per unit*

Particulars of Costs	**Rs. / unit**
Sales	79,600
Less: Contribution (40%)	31,840
Variable Cost	47,760
Less: Variable Selling Costs (Rs.79,600 × 0.1)	7,960
Variable Manufacturing Cost	39,800

Statement Showing Expected Profit

Particulars of Costs	**('000) Rs. / unit**	
	500 units	**750 units**
Sales	39,800 (Rs.79,600 x 500)	52,200 (Rs.69,600 x 750)
Less: Variable Mfg. Cost	19,900 (Rs.39,800 x 500)	29,850 (Rs.39,800 x 750)
Less: Variable Selling Cost	3,980 (Rs.39,800 x 0.1)	5,220 (Rs.52,200 x 0.1)
Add: Salvage Value	625	900
Less: Cost of Plant	3,500	5,200
Net Profit	13,045	12,830

Development cost is sunk and is not relevant.

Advice---

Based on the above 'Expected Profit' statement which is purely based on *financial considerations* firm may go for high price – low volume i.e. 500 units level. However, *non-financial considerations* are also given due importance as they account for actions that may not contribute directly to profits in the short run but may contribute significantly to profits in long run. Here, it is important to note that life cycle of product is two years and there is no significant difference between the profits at both levels. In this scenario firm may opt the plant having high capacity not only to increase its market share but also to establish a long term brand image.

(C)

Working

The given problem is a balanced minimization transportation problem. The objective of the company is to minimize the cost. Let us find the initial feasible solution using Vogel's Approximation method (VAM).

	A	**B**	**C**	**D**	**Supply**	**Diff.**
X	25	50	**100** 20	25	100/0	5 5 5 5
Y	**150** 30	40	**50** 35	**50** 10	250/200/0	20 20 5 5
Z	**100** 20	**100** 10	25	35	200/100/0	10 5 5 -
Demand	250/150/0	100/0	150 /0 /50	50/0	550	
Diff.	5	30	5	15		
	5	-	5	15		
	5	-	5	-		
	5	-	15	-		

Since the number of allocations m+n-1 (= 6), let us test the above solution for *optimality*.

We have taken $u_3 = 0$ (as stated in question), and rest of the u_i's, v_j's and Δ_{ij}'s are calculated as below-

$(u_i + v_j)$ Matrix for Allocated / Unallocated Cells

				u_j
15	5	20	-5	-5
30	20	35	10	10
20	10	25	0	0
V_j 20	10	25	0	

Now we calculate $\Delta_{ij} = C_{ij} - (u_i + v_j)$ for non basic/ unallocated cells which are given in the table below-

Δ_{ij} Matrix

10	45		30
	20		
		0	35

Answer to the Requirement

(i) Since, all cells values in $\Delta_{ij} = C_{ij} - (u_i + v_j)$ matrix are non- negative, hence the solution is optimum.

(ii) It may be noted that zero opportunity cost in cell (Z, C) indicates a case of alternative optimum solution.

Note: This question can also be solved by using other methods of finding **initial basic feasible solution**.

(D)

Statement Showing Quality Costs

Particulars	**Prevention Costs**	**Appraisal Costs**	**Internal Failure Costs**	**External Failure Costs**
Re-inspecting Rework	---	---	3,25,600	---
Training	3,75,500	---	---	---
Warranty Repairs	---	---	---	8,62,500
Line Inspection	---	2,12,500	---	---
Downtime	---	---	1,84,000	---
Design Engineering	3,62,800	---	---	---
Product Testing Equipment	---	4,15,800	---	---
Litigation Costs to defend allegations of defective products	---	---	---	2,90,500
Recording and reporting defects	---	2,67,600	---	---

Supplier evaluation	2,96,800	---	---	---
Storing and disposing waste	---	---	1,72,000	---
Product liability insurance	---	---	---	1,08,000
Expediting	---	---	---	3,27,000
Procedure Verification	---	2,54,000	---	---
Recalls	---	---	---	3,42,000
Total	10,35,100	11,49,900	6,81,600	19,30,000

Answer 2:

(A)

(i) Transfer Price *per unit* of Product Z that Division W Should Quote *in order to meet* Target Profit

Quotation for the 40,000 units of product Z should be such that meet Division W's target profit and interest cost on working capital. Therefore the minimum quote for product Z will be calculated as follows:

Particulars	**Amount (Rs.)**
Target Profit (given for the year)	2,50,00,000
Add: Interest Cost on Working Capital (Rs.12,00,00,000 @11.5%)	1,38,00,000
Required Profit	3,88,00,000
Add: Fixed Overhead	4,00,00,000
Target Contribution	7,88,00,000
Less: Contribution Earned --- External Sales {60,000 units × (Rs.2,500 – Rs.1,600)}	5,40,00,000
Contribution Required – Internal Sales	2,48,00,000
Contribution *per unit* of Product Z (Rs.2,48,00,000 ÷ 40,000 units)	620
Transfer Price of Product Z to Division B (Variable Cost *per unit* + Contribution *per unit*)	2,220

(ii) The Two Transfer Prices Based on Opportunity Costs

For the 30,000 units (i.e. maximum capacity – maximum external market demand) at variable cost of production i.e. Rs.1,600 per unit.

For the next 10,000 units (i.e. external market demand – maximum possible sale) at market selling price i.e. Rs.2,500 per unit.

(B)

(i) Calculation of Total Labour Hours Over the Life Time of The Product 'Kitchen Care'

The average time per unit for 250 units

$$Y_x = ax^b$$

Or, $$Y_{250} = 30 \times 250^{-0.3219}$$

Or, $$Y_{250} = 30 \times 0.1691$$

Or, $$Y_{250} = 5.073 \text{ hours}$$

Total time for 250 units = 5.073 × 250 units

= 1,268.25 hours

The average time per unit for 249 units

$$Y_{249} = 30 \times 249^{-0.3219}$$

Or, $Y_{249} = 30 \times 0.1693$

Or, $Y_{249} = 5.079$ hours

Total time for 249 units = 5.079 × 249 units

= 1,264.67 hours

Time for 250th unit = 1,268.25 hours – 1,264.67 hours

= 3.58 hours

Total Time for 1,000 units = (750 × 3.58 hours) + 1,268.25 hours

= 3,953.25 hours

(ii) Profitability of the Product 'Kitchen Care'

Sales 1,000 Units

Particulars	**Amount (Rs.)**
Sales	50,00,000
Less: Direct Material	18,50,000
Direct Labour (3,953.25 hours × Rs. 80)	3,16,260
Variable Overheads (1,000 units× Rs.1,000)	10,00,000
Contribution	18,33,740
Less: Packing Machine Cost	5,00,000
Profit	13,33,740

(iii) Average Target Labour Cost *per unit*

Particulars	**Amount (Rs.)**
Expected Sales Value	50,00,000
Less: Desired Profit (1,000 units × Rs. 800)	8,00,000
Target Cost	42,00,000
Less: Direct Material (1,000 units × Rs. 1,850)	18,50,000
Variable Cost (1,000 units × Rs. 1,000)	10,00,000
Packing Machine Cost	5,00,000
Target Labour Cost	8,50,000
Average Target Labour Cost *per unit* (Rs. 8,50,000 ÷ 1,000 units)	850

Answer 3:

(A)

Statement Showing 'Pareto Analysis'

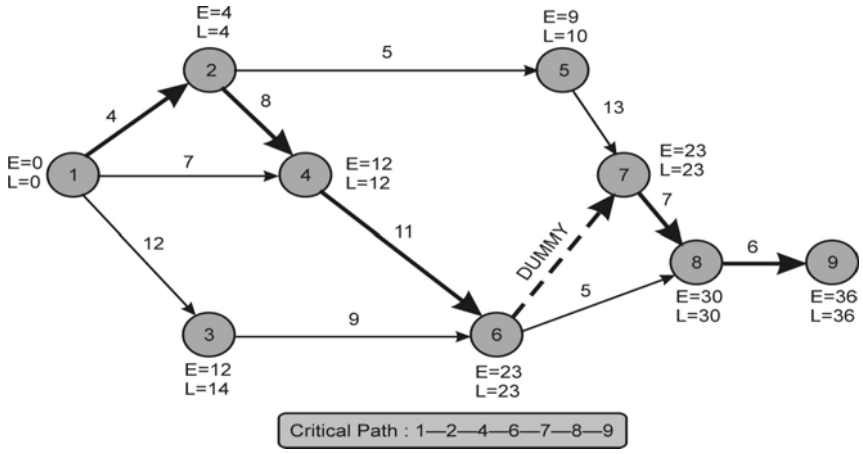
Model	Sales (Rs.'000)	% of Total Sales	Cumulative Total	Model	Cont. (Rs.'000)	% of Total Cont.	Cumulative Total %
Pareto Analysis Sales				**Pareto Analysis Contribution**			
A001	5,100	35.05%	35.05%	B002	690	30.87%	30.87%
B002	3,000	20.62%	55.67%	E005	435	19.47% *	50.34%
C003	2,100	14.43%	70.10%	C003	300	13.42%	63.76%
D004	1,800	12.37%	82.47%	D004	255	11.41%	75.17%
E005	1,050	7.22%	89.69%	F006	195	8.73%*	83.90%
F006	750	5.15%	94.84%	A001	180	8.05%	91.95%
G007	450	3.09%	97.93%	G007	120	5.37%	97.32%
H008	225	1.55%	99.48%	I009	45	2.01%	99.33%
I009	75	0.52%	100.00 %	H008	15	0.67%	100.00%
	14,550	100.00%			2,235	100.00 %	

(B)

(i) Calculation of Missing Figures:

Activity	Duration	EST	EFT	LST	LFT	Total Float
	Dij	Ei	Ei + Dij	Lj – Dij	Lj	LST– EST
1–2	4	0	4	0	4	0
1–3	12	0	12	2	14	2
1–4	7	0	7	5	12	5
2–4	8	4	12	4	12	0
2–5	5	4	9	5	10	1
3–6	9	12	21	14	23	2
4–6	11	12	23	12	23	0
5–7	13	9	22	10	23	1
6–7	0	23	23	23	23	0
6–8	5	23	28	25	30	2
7–8	7	23	30	23	30	0
8–9	6	30	36	30	36	0

(ii) The Network for the given problem:



(iii) The Various Paths in the Network are:

1–2–4–6–7–8–9 with Duration 36 Days

1–2–5–7–8–9 with Duration 35 Days 1–

3–6–7–8–9 with Duration 34 Days 1–2–

4–6–8–9 with Duration 34 Days 1–3–6–

8–9 with Duration 32 Days 1–4–6–7–8–

9 with Duration 31 Days 1–4–6–8–9

with Duration 29 Days

The Critical Path is 1–2–4–6–7–8–9 with Duration 36 Days.

Answer 4:

(A)

(i) Production Budget for Products / Budgeted Requirements of Components

Production Budget for Product M & N

Particulars	**'M' Units**	**'N' Units**
Inventory at the end of the year	10,000	20,000
Sales Forecast	80,000	1,50,000
Total Requirements	90,000	1,70,000
Less: Beginning Inventory	30,000	50,000
Production	60,000	1,20,000

Budgeted Requirements of Components 'P', 'Q' and 'R'

Components	**'P'**	**'Q'**	**'R'**
For Product 'M': Production 60,000 units			
'P': 60,000 × 1 per unit	60,000	---	---
'Q': 60,000 × 2 per unit	---	1,20,000	---
For Product 'N': Production 1,20,000 units			
'P': 1,20,000 × 2 per unit	2,40,000	---	---
'Q': 1,20,000 × 1 per unit	---	1,20,000	---
'R': 1,20,000 × 2 per unit	---	---	2,40,000
For comp 'R': Production 2,40,000 comp			

'Q': 2,40,000 × 1 per component 'R'	---	2,40,000	---
Total Requirements	3,00,000	4,80,000	

(ii) Optimum Order Quantity

	'P'	**'Q'**
EOQ	$\sqrt{\frac{2 \times 3,00,000 \times 1,500}{20 \times 20\%}}$	$\sqrt{\frac{2 \times 4,80,000 \times 1,500}{8 \times 20\%}}$
	= 15,000 components	= 30,000 components

(B)

The following is a possible scorecard for "North Garden"

Financial Perspective	Economic Value Added Revenue per villa
Customer Perspective	% repeat customers Number of customer complaints
Internal Business	Service rating of spa Staff hours per guest % cost spent for maintenance Travel guide rank for restaurant
Innovation and Learning	Employee retention Number of new services offered

(C)

Primal

Minimize $Z = 2x_1 - 3x_2 + 4x_3$

Subject to the constraints

$$3x_1 + 2x_2 + 4x_3 \geq 9$$

$$2x_1 + 3x_2 + 2x_3 \geq 5$$

$$-7x_1 + 2x_2 + 4x_3 \geq -10$$

$$6x_1 - 3x_2 + 4x_3 \geq 4$$

$$2x_1 + 5x_2 - 3x_3 \geq 3$$

$$-2x_1 - 5x_2 + 3x_3 \geq -3$$

$$x_1, x_2, x_3 \geq 0$$

Dual

Maximize $Z = 9y1 + 5y2 - 10y3 + 4y4 + 3y5 - 3y6$

Subject to constraints

$$3y_1 + 2y_2 - 7y_3 + 6y_4 + 2y_5 - 2y_6 \leq 2$$

$$2y1 + 3y_2 + 2y_3 - 3y_4 + 5y_5 - 5y_6 \leq -3$$

$$4y_1 + 2y_2 + 4y_3 + 4y_4 - 3y_5 + 3y_6 \leq 4$$

$$y_1, y_2, y_3, y_4, y_5, y_6 \geq 0$$

By substituting y5−y6= y7 the dual can alternatively be expressed as:

Maximize $Z = 9y_1 + 5y_2 - 10y_3 + 4y_4 + 3y_7$

Subject to constraints

$$3y_1 + 2y_2 - 7y_3 + 6y_4 + 2y_7 \leq 2$$

$$-2y_1 - 3y_2 - 2y_3 + 3y_4 - 5y_7 \geq 3$$

$$4y_1 + 2y_2 + 4y_3 + 4y_4 - 3y_7 \leq 4$$

$y_1, y_2, y_3, y_4 \geq 0$, y_7 unrestricted in sign.

Answer 5:
(A)

Statement Showing "Cost and Profit for the Next Year"

Particulars	**Existing Volume, etc.**	**Volume, Costs, etc. after 10% Increase**	**Estimated Sale, Cost, Profit, etc.***
	(Rs.)	(Rs.)	(Rs.)
Sale	5,00,000	5,50,000	5,72,000
Less: Direct Materials	2,50,000	2,75,000	2,69,500
Direct Labour	1,00,000	1,10,000	1,07,800
Variable Overheads	40,000	44,000	43,120
Contribution	1,10,000	1,21,000	1,51,580
Less: Fixed Cost#	60,000	60,000	58,800
Profit	50,000	61,000	92,780

(*) for the next year after increase in selling price @ 4% and overall cost reduction by 2%.

(#) Fixed Cost = Existing Sales – Existing Marginal Cost – 12.5% on Rs. 4,00,000
= Rs. 5,00,000 – Rs. 3,90,000 – Rs. 50,000
= Rs. 60,000

Percentage Profit on Capital Employed equals to 23.19% = (92780 / 400000) x 100

Since the Profit of Rs. 92,780 is more than 23% of capital employed, the proposal of the Sales Manager can be adopted.

(B)

Customer Profitability Statement

Particulars		**MT Ltd.**	**KG Ltd.**	**MG Bros.**
Sales (units)		**2,000**	**1,000**	**800**
		(Rs.)	(Rs.)	(Rs.)
Sales Revenue	(A)	2,20,00,000	1,10,00,000	88,00,000

Less: Average Variable Cost (B) (Rs. 5,500 × 60% = 3,300 p.u.)	66,00,000	33,00,000	26,40,000
Contribution [70%of Sales] (A)-(B)	1,54,00,000	77,00,000	61,60,000
Less: Additional Overheads			
Delivery Cost (No. of K.M. × Rs. 200)	2,00,000	1,60,000	1,80,000
Emergency Delivery Cost (No. of Emerg. Delivery × Rs. 21,000)	42,000	21,000	-
Order Processing Cost (No. of Orders × Rs. 6,000)	24,000	12,000	48,000
Specific Discount	55,00,000	22,00,000	13,20,000
Sales Commission	33,00,000	11,00,000	4,40,000
Advertisement Cost	8,75,000	6,15,000	4,30,000
Profit *per customer**	54,59,000	35,92,000	37,42,000
Profit Margin *per customer** (%)	24.81%	32.65%	42.52%
Rank	III	II	I

** Before deducting general fixed overhead cost*

The contribution margin is 70% for each customer but when the other overheads costs per customer is included in the above profitability statement the profitability of the three customers become different. MG Bros. is the most profitable customer.

(C)

(i) Under the Hungarian Assignment Method, the prerequisite to assign any job is that each row and column must have a zero value in its corresponding cells. If any row or column does not have any zero value then to obtain zero value, each cell values in the row or column is subtracted by the corresponding minimum cell value of respective rows or columns by performing row or column operation. This means if any row or column have two or more cells having same minimum value then these row or column will have more than one zero. However, having two zeros does not necessarily imply two equal values in the original assignment matrix just before row and column operations. Two zeroes in a same row can also be possible by two different operations i.e. one zero from row operation and one zero from column operation.

(ii) The order of matrix in the assignment problem is 4 × 4. The total assignment (allocations) will be four. In the assignment problem when any allocation is made in any cell then the corresponding row and column become unavailable for further allocation. Hence, these corresponding row and column are crossed mark to show unavailability. In the given assignment matrix two allocations have been made in A_{24} (2^{nd} row and 4^{th} column) and A_{32} (3^{rd} row and 2^{nd} column). This implies that 2^{nd} and 3^{rd} row and 2^{nd} and 4^{th} column are unavailable for further allocation.

Answer 6:

(A)

COMPUTATION OF VARIANCES

Material Usage Variance = Standard Price × (Standard Quantity – Actual Quantity)

= Rs.4.00 × (18,000* Kgs. – 20,000 Kgs.)

= Rs. 8,000 (A)

[(20000 kgs. / 2000 units) x 1800 units)]

Labour Efficiency Variance = Standard Rate × (Standard Hours – Actual Hours)

= Rs.8.00 × (14,400* hrs. – 14,800 hrs.)

= Rs.3,200 (A)

[(16000hrs. / 2000 units) x 1800 units]

Variable Overhead Efficiency Variance

= Standard Variable Overheads for Production –
Budgeted Variable Overheads for Actual hours

= (14,400 hrs. × Rs.3.00) – (Rs.3.00 × 14,800 hrs.)

= Rs.1,200 (A)

Fixed Overhead Volume Variance

= Absorbed Fixed Overheads– Budgeted Fixed Overheads

= (14,400 hrs. × Rs.3.00) – (16,000 hrs. × Rs.3.00)

= Rs.4,800 (A)

Sales Margin Volume Variance = Standard Margin – Budgeted Margin

= (1,800 units × Rs.56.00) – (2,000 units × Rs.56.00)

= Rs. 11,200 (A)

Sales Contribution Volume Variance

= Standard Contribution – Budgeted Contribution

= (1,800 units × Rs.80.00) – (2,000 units × Rs.80.00)

= Rs.16,000 (A)

(B)

Statement Showing "Reconciliation Between Budgeted Profit & Actual Profit"

Particulars	**Conv. Method (Rs.)**	**Relevant Cost Method (Rs.)**		
		Scarce Material	**Scarce Labour**	**No Scarce Inputs**
Budgeted Profit (2,000 units × Rs.56)	1,12,000	1,12,000	1,12,000	1,12,000
Sales Volume Variance	11,200 (A)	NIL*	12,000$ (A)	16,000 (A)
Material Usage Variance	8,000 (A)	24,000 (A)	8,000 (A)	8,000 (A)
Labour Efficiency Variance	3,200 (A)	3,200 (A)	7,200 (A)	3,200 (A)
Variable Overhead Effi. Variance	1,200 (A)	1,200 (A)	1,200 (A)	1,200 (A)

Fixed Overhead Volume Variance	4,800 (A)	N.A.#	N.A. #	N.A. #
Actual Profit	**83,600**	**83,600**	**83,600**	**83,600**

NOTES

Scarce Material

Based on conventional method, direct material usage variance is Rs.8,000 (A) i.e. 2,000 Kg. × Rs.4. In this situation material is scarce, and, therefore, material cost variance based on relevant cost method should also include contribution lost per unit of material. Excess usage of 2,000 Kg. leads to lost contribution of Rs.16,000 i.e. 2,000 Kgs. × Rs.8. **Total material usage variance based on relevant cost method, when material is scarce will be: Rs.8,000 (A) + Rs.16,000 (A) = Rs.24,000 (A).** Since labour is not scarce, labour variances are identical to conventional method.

Excess usage of 2,000 Kgs. leads to loss of contribution from 200 units i.e. Rs.16,000 (200 units × Rs.80). It is not the function of the sales manager to use material efficiently. Hence, loss of contribution from 200 units should be excluded while computing sales contribution volume variance.

(*)→

Therefore, sales contribution volume variance, when materials are scarce will be NIL i.e. Rs.16,000 (A) - Rs.16,000 (A).

Scarce Labour

Material is no longer scarce, and, therefore, the direct material variances are same as in conventional method. In conventional method, excess labour hours used are: 14,400 hrs. – 14,800 hrs. = 400 hrs. Contribution lost per hour = Rs.10. Therefore, total contribution lost, when labour is scarce will be: 400 hrs. × Rs.10 = Rs.4,000. **Therefore, total labour efficiency variance, when labour hours are scarce will be Rs.7,200 (A) i.e. Rs.3,200 (A) + Rs.4,000 (A).**

Excess usage of 400 hrs. leads to loss of contribution from 50 units i.e. Rs.4,000 (50 units × Rs.80). It is not the function of the sales manager to use labour hours efficiently. Hence, loss of contribution from 50 units should be excluded while computing sales contribution volume Variance.

($)→

Therefore, sales contribution volume variance, when labour hours are Scarce will be Rs.12,000 (A) i.e. Rs.16,000 (A) - Rs.4,000 (A).

Fixed Overhead Volume Variance

(#) →

The fixed overhead volume variance does not arise in marginal costing system. In absorption costing system, it represents the value of the under or over absorbed fixed overheads due to change in production volume. When marginal costing is in use there is no overhead volume variance, because marginal costing does not absorb fixed overheads.

(B)

Allocation of Random Numbers

Raw Material			Wages & Other Variable Overheads			Sales		
Mid Point	**Cum. Prob.**	**Random Nos.**	**Mid Point**	**Cum. Prob.**	**Random Nos.**	**Mid Point**	**Cum. Prob.**	**Random Nos.**
9	0.2	0 – 1	12	0.3	0 – 2	36	0.1	0
11	0.5	2 – 4	14	0.8	3 – 7	40	0.4	1 – 3
13	0.8	5 – 7	16	1.0	8 – 9	44	0.8	4 – 7
15	1.0	8 – 9				48	1.0	8 – 9

Simulation Table (Rs. in 000)

Month	**Raw Material**	**Wages & Other V.O**	**Sales**	**Fixed Cost**	**Net Cash Flow**	**Cash Balancing** (Opening Rs.40 thousand)
1	11	12	36	15	-2	38
2	11	14	44	15	+4	42
3	9	16	44	15	+4	46
4	9	12	36	15	0	46
5	11	16	40	15	-2	44
6	13	16	48	15	+4	**48**

(C)

Committed Fixed Cost	Discretionary Fixed Cost
(ii) Rents payable for the next 6 months.	(i) New Advertisement Cost.

Answer 7:

(A)

	Situation	Appropriate Pricing Policy
(i)	'W' is a new product for the company and the market and meant for large scale production and long term survival in the market. Demand is expected to be elastic.	Penetration Pricing
(ii)	'X' is a new product for the company, but not for the market. X's success is crucial for the company's survival in the long term.	Market Price or Price Just Below Market Price
(iii)	'Y' is a new product to the company and the market. It has an inelastic market. There needs to be an assured profit to cover high initial costs and the unusual sources of capital have uncertainties blocking them.	Skimming Pricing
(iv)	'Z' is a perishable item, with more than 80% of its shelf life over.	Any Cash Realizable Value*

(B)

A **Performance Budget (PB)** is one which presents the purposes and objectives for which funds are required, the costs of the programmes proposed for achieving those objectives, and quantities data measuring the accomplishments and work performed under each programme. For an enterprise that wants to adopt PB, it is thus imperative that:

- The objectives of the enterprise are spelt out in concrete terms.
- The objectives are then translated into specific functions, programmes, activities and tasks for different levels of management within the realities of fiscal; constraints;
- Realistic and acceptable norms, yardsticks or standards and performance indicators should be evolved and expressed in quantifiable physical units.
- A style of management based upon decentralized responsibility structure should be adopted, and
- An accounting and reporting system should be developed to facilities monitoring, analysis and review of actual performance in relation to budgets.

(C)

Statement Showing Selling Price

	Perfect Competition	Monopoly
Units	6,000	1,200
Contribution (Rs. 1,06,000 + Rs. 74,000)	1,80,000	1,80,000
Contribution *per unit*	30	150
Variable Cost *per unit* (150 x (4 / 3))	---	200
Variable Cost *per unit*	200	---
Selling Price *per unit*	230	350

(D)

(i) Invalid

Kaizen costing is the system of cost reduction procedures which involves making small and continuous improvements to the production processes rather than innovations or large-scale investment.

(ii) Valid

The training of employees is very much a long-term and ongoing process in the Kaizen costing approach. Training enhances the abilities of employees.

(iii) Invalid

Kaizen Costing approach involves everyone from top management level to the shop floor employees. Every employee's active participation is a must requirement.

(iv) Invalid

Though the aim of Kaizen Costing is to reduce the cost but at the same time it also aims to maintain the quality. Kaizen costing also aims to bring the clarity in roles and responsibilities for all employees.