Management Accounting

Summer-2023

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Summer Exam-2023
Solutions – Management Accounting

Q.1. **Competitive pricing** is the process of selecting strategic price points to best take advantage of a product or service based market relative to competition. This pricing method is used more often by businesses selling similar products since services can vary from business to business, while the attributes of a product remain similar. This type of pricing strategy is generally used once a price for a product or service has reached a level of equilibrium, which occurs when a product has been on the market for a long time and there are many substitutes for the product.

Skim pricing is a pricing strategy that sets new product prices high and subsequently lowers them as competitors enter the market. Skim pricing is the opposite of penetration pricing, which prices newly launched products low to build a big customer base at the outset.

Total Marks 08

Q.2. (a) Contribution per unit = Rs. (12 – 9) = Rs.3.
The C/S ratio is 3/12 = 0.25
Budgeted profit = (90,000 x Rs.3) – Rs.240,000 = Rs.30,000

Q.2. (b) Breakeven point in sales revenue = Fixed costs/C/S ratio
= Rs.240,000/0.25 =Rs.960,000

Q.2. (c) Breakeven point in units of sale = Fixed costs/C/S per unit
Rs.240,000/Rs3 per unit = 80,000 units per month

Q.2. (d) Margin of safety in units= 90,000 – 80,000=10,000
Margin of safety in percentage= (90,000 – 80,000)/90,000 = 11.1%

Q.2. (e) To achieve a profit of Rs.120,000,
total contribution must be Rs. (240,000 + 120,000) = Rs.360,000.

Sales must be Rs.360,000/Rs.3 per unit = 120,000 units or Rs.360,000/0.25 = Rs.1,440,000 in sales revenue.

Total Marks 10

Q.3. We need to prepare a flexible budget for 700 units:

	Budget		Flexed Budget	Actual	Variance
Sales	1,000 units	Per unit	700 units	700 units	-
	Rs.	Rs.	Rs.	Rs.	
Sales	20,000	20	14,000	14,200	200 F
Variable cost					
Direct materials	8,000	8	5,600	5,200	400 F
Direct labour	4,000	4	2,800	3,100	300 A
Variable overhead	2,000	2	1,400	1,500	100 A
	14,000	14	9,800	9,800	-
Contribution	6,000		4,200	4,400	200 F
Fixed costs	5,000	N/A	5,000	5,400	400 A
Profit/(loss)	1,000		(800)	(1,000)	200 A

Total Marks 16

Q.4. Investment = Rs.70,000
Annuity factor at 9%, years 1 – 5 = 3.890
Minimum annuity required = Rs.17,995 (= Rs.70,000/3.890)

Total Marks 12

Q.5. **Competitive pricing** is the process of selecting strategic price points to best take advantage of a product or service based market relative to competition. This pricing method is used more often by businesses selling similar products since services can vary from business to business, while the attributes of a product remain similar. This type of pricing strategy is generally used once a price for a product or service has reached a level of equilibrium, which occurs when a product has been on the market for a long time and there are many substitutes for the product.

The penetration pricing strategy involves offering a new product or service at a low initial price to gain customers' attention. The goal is to aggressively get customers in the door with low prices and gain market share.

Total Marks 10

Q.6. Flexible budget statement for next year operating at 85% capacity:

	Workings	
Output	1	13,077 units
Variable Costs		Rs.
Direct Material	2	1,386,162
Direct Wages	3	2,357,129
Variable Production Overheads	4	489,734
		4,233,025
Fixed costs		
Production overhead	5	330,000
Total costs		4,563,025

Workings:

1. 65% of capacity = 10,000 units
~100% of capacity = 10,000 / 0.65 = 15,385 units
~85% of capacity = (10,000 / 0.65) x 0.85 = 13,077 units
~75% of capacity = 11,538
~55% of capacity = 8,462

2. Current direct material cost per unit = Rs.1,000,000 / 10,000= Rs.100 per unit
Flexible budget allowance for next year = Rs.100 x 1.06 x 13,077= Rs.1,386,162

3. Current direct wages cost per unit = Rs.1,750,000 / 10,000= Rs.175 per unit
Flexible budget allowance for next year = Rs.175 x 1.03 x 13,077= Rs.2,357,129

4. Production overhead increases by Rs.53,830 for an increase in activity of (10,000 – 8,462=1,538) units
➔Variable production overhead per unit = 53,830/1,538=Rs.35
Variable overhead allowance for 85% capacity = 13,077 x Rs.35 = Rs.457,695

Plus 7% increase	Rs.32,039
Total allowance	Rs.489,734

5.

	Rs.
Total production overhead at 65% activity	650,000
Less variable overhead (10,000 x Rs.35 (W4))	(350,000)
Fixed overhead this year	300,000
Plus 10% increase	+30,000
Total allowance	330,000

Total Marks 20

Q.7. Weighted average cost of capital (WACC) represents a firm's average after-tax cost of capital from all sources, including common stock, preferred stock, bonds, and other forms of debt. WACC is the average rate that a company expects to pay to finance its assets.

WACC = (E/V x Re) + ((D/V x Rd) x (1 – T))

Where:
E = market value of the firm's equity (market cap)
D = market value of the firm's debt
V = total value of capital (equity plus debt)
E/V = percentage of capital that is equity
D/V = percentage of capital that is debt
Re = cost of equity (required rate of return)
Rd = cost of debt (yield to maturity on existing debt)
T = tax rate

Total Marks 07

Q.8. Savings are 75,000 units x (Rs.3 – Rs.2.50) = Rs.37,500 per annum.
Additional costs are Rs.7,500 per annum.
Net cash savings are therefore Rs.30,000 per annum.

Year	Cash flow	PV factor	PV of cash flow
	Rs.	12%	Rs.
0	(90,000)	1.000	(90,000)
1	30,000	0.893	26,790
2	30,000	0.797	23,910
3	30,000	0.712	21,360
4	40,000	0.636	25,440
		NPV	+7,500

The NPV is positive and project is expected to earn more than 12% pa and is therefore acceptable. Sunny should purchase the machine.

Total Marks 12

Q.9. (a) Breakeven point in units =Total fixed costs/ Contribution per unit
= Rs.70,000/Rs. (40-30) = 7,000 units

Q.9. (b) Margin of safety in percentage
=Budgeted units - Breakeven units / Budgeted units x 100
=1,000 units/8,000 units x 100 = 12.5%

Q.9. (c) The margin of safety indicates to management that actual sales can fall short of budget by1,000units or 12.5% before the breakeven point is reached and no profit at all is made.

Total Marks 05

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