

Q No 4

Given Data:-

	Company X	Y	Z
Sales	500,000	d	g
NI	25,000	30,000	h
Total assets	10,000	e	250,000
Asset turnover	a?	f	0.4
Profit margin	b?	0.4%	5%
ROA	c?	2%	i

Solve

a)

$$\text{Asset Turnover} = \frac{\text{Sales}}{\text{Total asset}}$$

$$= \frac{500,000}{10,000}$$

$$\text{Asset Turnover} = 50 \text{ Time}$$

b)

$$\text{Profit margin} = \frac{\text{NI}}{\text{Sales}}$$

$$\text{Profit margin} = \frac{25000}{500000}$$

$$\text{Profit margin} = 0.05 \text{ or } 5\%$$

c)

$$\text{Return on total Asset} = \frac{\text{NI}}{\text{Total Asset}}$$

$$= \frac{25000}{100000}$$

$$\text{ROA} = 0.25 \text{ or } 25\%$$

$$\text{ROA} = 0.25 \text{ or } 25\%$$

Company y

d) d) Sales = ?

as per Given Data we use profit margin ratio for sales

$$\text{Profit margin} = \frac{\text{NI}}{\text{sale}}$$

$$\text{Sales} = \frac{\text{NI}}{\text{Profit margin}}$$

$$= \frac{30,000}{0.4\%}$$

$$\text{Sales} = \text{Rs. } 7,500,000$$

e)

Total Asset

RoA has asset value so we calculate asset value by using RoA formula

$$\text{RoA} = \frac{\text{NI}}{\text{Total Asset}}$$

$$2\% = \frac{30,000}{\text{T. Asset}}$$

$$\text{T. Asset} = \frac{30,000}{2\%}$$

$$\text{Total Asset} = \text{Rs. } 1,500,000$$

f)

Total Asset Turnover

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{T-Asset}}$$

$$= \frac{7800000}{1500000}$$

$$\text{Total Asset Turnover} = 5 \text{ Times}$$

g)

Net Sales

we know that Asset Turnover formula contains Net Sales

$$\text{Asset Turnover} = \frac{\text{Sales}}{\text{Total Asset}}$$

$$0.4 = \frac{\text{Sales}}{250000}$$

$$0.4 \times 250000 = \text{Sales}$$

$$\text{Sales} = \text{Rs } 100000$$

h) net income

As we know Profit margin ratio contains net income

$$\text{Profit margin} = \frac{\text{NI}}{\text{Sales}}$$

$$5\% = \frac{\text{NI}}{100000}$$

$$5\% \times 100000 = \text{NI}$$

$$\text{NI} = \text{Rs } 5000$$

i)

$$\text{ROA} = \frac{\text{NI}}{\text{Asset}}$$

$$= \frac{5000}{250000}$$

$$\text{ROA} = 0.02 \text{ or } 2\%$$

Q NO 3

Given Data

Cost = \$ 42,300
Life = 10 year
Units = 363,000 units
salvage value = \$ 6000

To be find

2nd year depreciation = ?

Solve

Straight line method

$$\text{depreciation} = \frac{\text{Cost} - \text{salvage value}}{\text{Life}}$$

$$= \frac{42300 - 6000}{10}$$

depreciation = \$ 3630 for every year

The depreciation for 2nd year

is \$ 3630

B)

Given Data

$$\text{Current Ratio} = \text{C.R} = 2$$

$$\text{Quick Ratio} = \text{Q.R} = 1.4$$

$$\text{Current Liabilities} = \text{C.L} = 100,000$$

$$\text{Inventory Turnover} = \text{Inv. Turn} = 6x$$

$$\text{Gross Profit Margin} = 0.20$$

To be find
Sales = ?

Solve

$$\text{C.R} = \frac{\text{C.A}}{\text{C.L}}$$

$$2 = \frac{\text{C.A}}{100,000}$$

$$\text{C.A} = 100,000 \times 2$$

$$\boxed{\text{C.A} = 200,000}$$

Put C.A value in Quick Ratio
for inventory

$$\text{Q.R} = \frac{\text{C.A} - \text{inventory}}{\text{C.L}}$$

$$1.4 = \frac{200,000 - \text{inventory}}{100,000}$$

$$1.4 \times 100,000 = 200,000 - \text{inventory}$$

$$140,000 = 200,000 - \text{inventory}$$

$$\text{Inventory} = 200,000 - 140,000$$

$$\text{Inventory} = \text{RS. } 60,000$$

$$\text{Inventory Turnover} = \frac{\text{COGS}}{\text{inventory}}$$

$$6 = \frac{\text{COGS}}{60,000}$$

$$\text{COGS} = 60,000 \times 6$$

$$\text{COGS} = \text{RS } 360,000$$

$$\text{Gross Profit margin} = \frac{\text{Gross Profit}}{\text{sales}}$$

$$\text{Gross Gross Profit} = \text{Sales} - \text{COGS}$$

$$0.20 = \frac{\text{Sales} - \text{COGS}}{\text{Sales}}$$

$$0.20 \text{ Sales} = \text{Sales} - 360,000$$

$$0.20 \text{ Sales} - \text{Sales} = -360,000$$

$$-0.80 \text{ Sales} = -360,000$$

$$\text{Sales} = \frac{-360,000}{-0.80}$$

$$\text{Sales} = \text{Rs } 450,000$$

Q NOS

Given Data

per set Price = Rs 600

Total Revenue = Rs 240,000

of 400 set

Total variable cost = Rs 160,000

Fixed cost = Rs 50,000

To be found

Break even Point unit = ?

Solve

at Break even point Profit = 0

and Pro

$$T. \text{Revenues} = T. \text{variable cost} + F.C$$

so put values

$$600 (\text{unit}) = \frac{160000}{400} (\text{unit}) + 50000$$

$$600 \text{ unit} = 400 \text{ unit} + 50000$$

$$600 \text{ unit} - 400 \text{ unit} = 50000$$

$$200 \text{ Unit} = 50000$$

$$\text{Unit} = \frac{50000}{200}$$

Break even point = 250 units

(B)

Graber corporation

Sales Budget

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Budgeted unit sales	16000	15000	14000	15000

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year
Per unit Price	22	22	22	22	
Total Sales	₹352,000	₹330,000	₹308,000	₹330,000	

Schedule of expected cash collection

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Account Receivable	66,000			
1st Quarter	264,000	70,400		
2nd Quarter		247,500	66,000	
3rd Q			231,000	61,600
4th				247,500
Total cash collection	₹330,000	₹313,900	₹297,000	₹309,100

(b) 2 Company Production Budget

	1st	2nd	3rd	4th
Budget sales	16,000	15,000	14,000	15,000
Ending inventory	3,000	2,800	3,000	3,400

Total unit needed	19000	17800	17000	18400
opening inventory	3200	3000	2800	3000
Production Required	15800	20800	19800	21400

Q NO

1)

Direct Labour

Direct Labour = Total manufacturing cost
- (cost of DM + F. overhead)

$$= \frac{8}{15} \times 1500000 - (300,000 + 20000 - 140000)$$

$$\text{Direct labour} = 340$$

ii, iii) Data incomplete for work in progress end beginning

iv) cost of manufacture good is Rs 800000
 $= \frac{8}{15} \times 1500000 = \text{Rs } 800000$

2) Cost of Good Sold

$$\text{COGS} = \text{op} + \text{Purchased} - \text{closing}$$

$$30,000 + 800,000 - 80,000$$

$$\text{COGS} = 750,000$$

3)

income statement for the year end Dec, 31, 2007

	Rs,000
Sales	1500
COGS	<u>(750)</u>
Gross Profit	750
Adm exp	(210)
Sell exp	(20)
	<hr/>
operating income	<u><u>520</u></u>

4) Units manufactured

$$\text{units manufacture} = \text{sold unit} + \text{opening} - \text{closing}$$
$$1000 + 60 - 25$$

$$= 1035 \text{ unit manufactured}$$

5) Per unit cost of good manufactured

$$\text{Total cost} = 800000$$

$$\text{per unit} = \frac{800000}{1035}$$

$$\text{per unit} = \text{Rs. } 772.94$$