

# SECTION - I

QNO: 03

Ans:

a) 2<sup>nd</sup> year depreciation by using  
Straight line Method.

Given

Cost of Machine = \$ 42300

Scrap Value = \$ 6000

Useful life = 10 years.

Find 2<sup>nd</sup> year depreciation.

Solution

Depreciation for machine in Straight line Method

$$\begin{aligned} \text{Depreciation} &= \frac{\text{Cost} - \text{Scrap Value}}{\text{Useful life}} \\ &= \frac{42300 - 6000}{10} = \boxed{3630 \text{ Ans}} \end{aligned}$$

By using straight line method Depreciation of every year is same.

b) Calculate

B) Calculate Sales by using given data.  
for BB Corp.

Given

$$\text{Current Ratio} = 2.0$$

$$\text{Quick Ratio} = 1.4$$

$$\text{Current liabilities} = \text{Rs } 100,000$$

$$\text{Inventory turnover} = 6 \text{ times.}$$

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

Solution:

1st Step Current Asset

$$\begin{aligned} \text{Current Assets} &= \text{Current Ratio} \times \text{Current Liabilities} \\ &= 2 \times 100,000 \end{aligned}$$

$$\text{Current Assets} = \text{Rs } 200,000$$

2nd Step Inventory by using Quick Ratio Formula

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

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

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

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

$$-60,000 = - \text{Inventory}$$

$$\text{Inventory} = \text{Rs } 60,000$$

Step 3 Cost of goods sold Calculation

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

$$| \text{Cost of goods sold} = 360,000$$

Step 4 Sales Calculation

→ As % of Gross profit is 20% of Sales which indicated 80% is Cost of Goods sold.

$$\text{Sales} = \frac{\text{COGS}}{\% \text{ of COGS}} = \frac{360,000}{80\%} =$$

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

QNO:04

Ans

Given	Company X	Company Y	Company Z
Sales	Rs 500,000	(d) 750,000	(g) 100,000
Net Income	Rs 25,000	Rs 30,000	(h) 50,000
Total Assets	Rs 100,000	(e) 1500,000	Rs 250,000
Total Assets turnover	(a) 5 times	(f) 5 times	0.4
Profit Margin	(b) 5%	0.4%	5%
Return on Total Assets	(c) 25%	2%	(i) 2%

a) Total Assets turnover

$$= \frac{\text{Sales}}{\text{Total Assets}} = \frac{500,000}{100,000} = 5 \text{ times Ans.}$$

b) Profit Margin

$$= \frac{\text{Net Income} \times 100}{\text{Sales}} = \frac{25,000 \times 100}{500,000} = 5\% \text{ Ans.}$$

c) Return on Assets

$$= \frac{\text{Net Income}}{\text{Total Assets}} = \frac{25,000}{100,000} = 25\% \text{ Ans.}$$

d) Sales

$$= \frac{\text{Net Income}}{\text{Profit Margin \%}} = \frac{30,000}{0.04} = 750,000$$

e) Total Assets

$$= \frac{\text{Net Income}}{\text{Return on Assets}} = \frac{30,000}{0.02} = 1,500,000$$

f) Total Assets turnover

$$\frac{\text{Sales}}{\text{Total Assets}} = \frac{7500000}{1500000} = 5 \text{ times}$$

g) Sales

Total Assets turnover  $\times$  Total Assets

$$2500000 \times 0.4 = 1000000$$

h) Net Income

Sales  $\times$  Profit Margin %

$$1000000 \times 0.05 = 50000$$

i) Return on Assets

$$\frac{\text{Net Income}}{\text{Total Assets}} = \frac{50000}{2500000} = 2\%$$

$$\text{Total Assets} = 2500000$$

## SECTION II

QNO: 05

Ans Given

Sales 100000 = 240000  
Fixed cost = 50000  
Variable cost 180000  
a) Break even point in units. ?

$$\text{Break even in unit} = \frac{\text{Total Fixed Cost}}{\text{Contribution Margin per unit}}$$

$$\begin{aligned}\text{Contribution Margin in unit} &= \text{Sales per unit} - \text{Variable Cost per unit} \\ &= 600 - \left( \frac{160000}{1000} \right) \\ &= 600 - 400 = 200\end{aligned}$$

$$\text{B/E in units} = \frac{50000}{200} = \boxed{250 \text{ Ans}}$$

Answered enterprise must sell 250 units to reach at Break even point.

B)

Given

	1st Qtr	2nd	3 <sup>rd</sup>	4 <sup>th</sup>
Budgeted unit sales	16000	15000	14000	15000

Selling price per unit = \$ 22

% of collection = 75% in 1st year, 20% in 2nd year

Account Receivable (Beginning) \$ 66000

Beginning Inventory (1st Qtr) = 3200

Ending Inventory (4th Qtr) = 3400

## GRABER CORPORATION Sales Budget

	1st Qtr	2nd Qtr	3 <sup>rd</sup> Qtr	4th Qtr	Total
Unit Sales	16000	15000	14000	15000	60000
Selling price	\$ 22	\$ 22	\$ 22	22	x 22
Total Sales	352000	330000	308000	330000	1320000

Working

Total Sales = Budgeted unit x Selling price unit

The Sales of Graber Corporation for 1st Quarter is \$ 352000,  
for 2nd Quarter \$ 330000, for 3<sup>rd</sup> Quarter is 308000 and  
for 4th Quarter is \$ 330000 and <sup>Budgeted</sup> total sales are \$ 1,320,000

# Graber Corporation

## Schedule of Cash Collection

	1st	2nd	3rd	4th	Total	Year
A/c Receivable	\$66,000					66,000
1st Quarter (75%)	\$264,000					264,000
2nd Quarter (20%)		\$70,400				70,400
2nd Quarter (75%)		\$247,500				247,500
2nd Quarter (20%)			\$66,000			66,000
3rd Quarter (75%)			\$231,000			231,000
3rd Quarter (20%)				\$61,600		61,600
4th Quarter (75%)				\$247,500		247,500
	\$330,000	\$317,900	\$297,000	\$309,100		\$1,254,000

Working Cash collection = Total Sales x % of collection

As seen in the schedule of cash collection budget Graber Corporation anticipates \$330,000 in 1st Quarter, \$317,900 in 2nd Quarter, \$297,000 in 3rd Quarter and \$309,100 in 4th Quarter. In whole year expected cash collection of whole year is \$1,254,000.



## 2) Requirement

### Graben Corporation Production Budget

	1st	2nd	3rd	4th	Total
Unit Sales	16000	15000	14000	15000	60000
Add: Ending Inventory	3000	2800	3000	3400	3400
Units need	19000	17800	17000	18400	63400
less: Beginning Inventory	(3200)	(3000)	(2000)	(3000)	(3200)
Required Production	15800	14800	14200	15400	60200

QNO: 8

Ans

1.

⇒ Direct labour = ?

As FOH is 70% of Conversion cost, so 30% is direct labour.

$$\text{Conversion Cost} = \frac{\text{FOH Amount}}{\% \text{ of FOH Amount}} = \frac{140000}{0.7}$$

$$\text{Conversion Cost} = 200,000$$

$$\begin{aligned} \text{Direct labour} &= \text{Conversion Cost} - \text{FOH} \\ &= 200,000 - 140,000 \end{aligned}$$

$$\text{Direct labour} = 60,000$$

Work in process ending

⇒ Cost of Goods Manufactured =  $\frac{8}{15}$  of sales

$$\text{Sales} = 1,500,000$$

$$\text{COGM} = \frac{8}{15} \times 1,500,000$$

$$\text{Cost of Goods Manufactured} = \text{Rs } 800,000$$

⇒ Work in Process Cost

For Work in Process Beginning Cost of goods manufactured

Formula will be used -

$$\text{COGM} = \frac{\text{Total Manufacturing Cost}}{\text{unit}} + \text{Work in Process (Beginning)} - \text{Work in Process (Ending)}$$

As work in process ending is 70% of WIP (Beginning).  
will put it on the place of Work in Process (Ending).  
To find work in process (Beginning).

$$\begin{aligned} \text{Total Manufacturing Cost} &= \text{Prime Cost} + \text{Conversion Cost} \\ &= 380,000 + 140,000 \\ \text{TMC} &= \text{Rs } 520,000 \end{aligned}$$

$$800,000 = 520,000 + \frac{100}{100} \text{ WIP (Beginning)} - 70\% \text{ WIP (Ending)}$$

$$800,000 - 520,000 = 30\% \text{ WIP (Beginning)}$$

$$\frac{280,000}{0.3} = \text{WIP (Beginning)}$$

0.3

$$\boxed{\text{Work in Process (Beginning)} = \text{Rs } 933,334 \text{ Ans.}}$$

Work in Process Ending.

$$\text{COGM} = \text{TMC} + \text{WIP (Begin)} - \text{WIP (Ending)}$$

$$\begin{aligned} \text{WIP (Ending)} &= \text{TMC} + \text{WIP} - \text{COGM} \\ &= \frac{520,000}{800,000} + 933,334 - 800,000 \\ &= 145,334 - 800,000 \end{aligned}$$

$$\boxed{\text{WIP (Ending)} = \text{Rs } 65,334}$$

2  
3)

AADIL & Co. (31-12-2007)

Cost of Goods Sold Statement

Raw Material Inventory (Opening)	Rs 50,000
Add: Purchases	+ 300,000
Raw material available for use	350,000
less: Raw material closing inventory	(20,000)
Raw Material used	320,000
Add: Direct labour incurred	+ 60,000
Prime Cost	380,000
Add: Factory overhead	+ 140,000
Total Manufacturing Cost	520,000
Add: Work in process (Beginning)	+ 933,334
Cost of Goods to be Manufactured	1453334
less: Work in process (Ending)	(653334)
Cost of Goods Manufactured	800,000
Add: Finished Goods (Opening)	30,000
Cost of Goods Available for Sale	830,000
less: Finished Goods (Ending)	(80,000)
Cost of Goods Sold	750,000

3)

## ADIL &amp; CO.

Income statement for 31-12-2007

	Debit	Credit
Sales		1500,000
less: Cost of Goods Sold		(750,000)
Gross Profit		750,000
less: Operating Expense		
Administration & General Expense	(210,000)	
Marketing & Selling Expense	(20,000)	
		(230,000)
Net Income		Rs. 520,000

## 4) Units Manufactured.

Number of Unit Sold	1000
Add: Finished good (Ending)	60
less: Finished goods (Beginning)	(25)
No of units Manufactured:	1035

$$5) \text{ Cost per units} = \frac{\text{Cost of Goods Manufactured}}{\text{No of unit Manufactured}}$$

$$= \frac{800,000}{1035}$$

$$\text{Cost pu unit} = \text{Rs } 772.92$$