# **Accounting Ratios**

Question:1 From the following compute Current Ratio:

Trade Receivable SundryDebtors	1,80,000	Bills Payable	20,000
Prepaid Expenses	40,000	Sundry Creditors	1,00,000
Cash and Cash Equivalents	50,000	Debentures	4,00,000
Marketable Securities	50,000	Inventories	80,000
Land and Building	5,00,000	Expenses Pavable	80,000

#### Solution:

Current Assets = Trade Receivables + Pre-paid Expenses + Cash and Cash Equivalents + Marketable Securities + Inventories

= Rs 1,80,000 + Rs 40,000 + Rs 50,000 + 50,000 + 80,000 = Rs 4,00,000

Current Liabilities = Bills Payable + Sundry Creditors + Expenses Payable = Rs 20,000 + Rs 1,00,000 + Rs 80,000 = Rs 2,00,000

Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{4,00,000}{2,00,000} = 2:1$ 

Question:2

Calculate Current Ratio from the following information:

Particulars		Particulars	
Total Assets	5,00,000	Non-current Liabilities	1,30,000
Fixed Tangible	2 50 000	Non-current	1,50,000
Assets	2,50,000	Investments	
Shareholders' Funds	3,20,000		

## Solution:

Total Assets = Fixed Tangible Assets + Non - Current Investments + Current Assets 5,00,000 = 2,50,000 + 1,50,000 + Current Assets Current Assets = 5,00,000 - 4,00,000 = Rs 1,00,000

Total Assets = Shareholder's Funds + Non – Current Liabilities + Current Liabilities 5,00,000 = 3,20,000 + 1,30,000 + Current Liabilities Current Liabilities = 5,00,000 - 4,50,000 = Rs 50,000

Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{1,00,000}{50,000} = 2:1$ 

#### Question:3

Current Ratio is 2.5, Working Capital is 1,50,000. Calculate the amount of Current Assets and Current Liabilities. Solution:

 $\begin{array}{l} \hline Current \ Assets \\ \hline Current \ Ratio = \hline Current \ Liabilities \\ \hline Current \ Assets \\ 2.5 = \hline Current \ Liabilities \\ \hline Current \ Assets = 2.5 \ Current \ Liabilities \\ \hline Current \ Assets = 2.5 \ Current \ Liabilities \\ 1,50,000 = 2.5 \ Current \ Liabilities - \ Current \ Liabilities \\ \hline Current \ Liabilities = \hline Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Current \ Liabilities \\ \hline Current \ Liabilities = \ Rs \ 1,00,000 \\ \hline \end{array}$ 

Current Assets = 2 .5 Current Liabilities Current Assets = 2 .5 × 1,00,000 = Rs 2,50,000

### Question:4

Working Capital is 9,00,000; Trade payables 90,000; and Other Current Liabilities are 2,10,000. Circulate Current Ratio. Solution: Working Capital = Rs 9,00,000 Current Liabilities = Trade Payables + Other Current Liabilities = Rs 90,000 + Rs 2,10,000 = Rs 3,00,000 Working Capital = Current Assets - Current Liabilities Rs 9,00,000 = Current Assets - Rs 3,00,000 Current Assets = Rs 9,00,000 + Rs 3,00,000 = Rs 12,00,000

 $Current \ Ratio \ = \frac{Current \ Assets}{Current \ Liabilities} = \ \frac{12,00,000}{3,00,000} = \ 4:1$ 

#### Question:5

Working Capital 1,80,000; Total Debts 3,90,000; Long-Term Debts 3,00,000. Calculate Current Ratio. Solution: Total Debts = 3,90,000 Long-term Debts = 3,00,000

Current Liabilities = Total Debts - Long-term Debts

= 3,90,000 - 3,00,000 = 90,000

Working Capital = Current Assets - Current Liabilities

1,80,000 = Current Assets - 90,000

Current Assets = 2,70,000

#### Question:6

Current Assets are 7,50,000 and Working Capital is 2,50,000. Calculate Current Ratio.

#### Solution:

Current Assets = Rs 7.50.000 Working Capital = Bs 2.50.000 Working Capital = Current Assets - Current Liabilities 2,50,000 = 7,50,000 - Current Liabilities Current Liabilities = 7,50,000 - 2,50,000 = Rs 5,00,000

Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{7,50,000}{5,00,000} = 1.5:1$ 

# Question:7

Trade Payables 50,000, Working Capital 9,00,000, Current Liabilities 3,00,000. Calculate Current Ratio.

#### Solution:

Working Capital = Current Assets - Current Liabilities 9,00,000 = Current Assets - 3,00,000 Current Assets = 9,00,000 + 3,00,000 = Rs 12,00,000 CurrentAssets

Current Ratio = CurrentLiabilities 12,00,000  $=\overline{3,00,000}$  = 4:1

#### Question:8

A company had Current Assets of 4,50,000 and Current Liabilities of 2,00,000. Afterwards it purchased goods for 30,000 on credit. Calculate Current Ratio after the purchase. Solution:

Current Assets = Rs 4.50.000 Current Liabilities = Rs 2,00,000 Purchase of Goods on Credit for Rs 30,000 will have two effects:

- 1. Increase Stock by Rs 30,000, Current Assets will thereby increase to Rs 4,80,000
- Rs4, 50, 000 + Rs30, 000 2. Increase Creditors by Rs 30,000 and therefore Current Liabilities will now be Rs 2,30,000 *Rs*2,00,000 + *Rs*30,000
- Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{4,80,000}{2,30,000} = 2.08:1$

## Question:9

Current Liabilities of a company were 1,75,000 and its Current Ratio was 2:1. It paid 30,000 to a Creditor. Calculate Current Ratio after payment. Solution:

Current Ratio =  $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{2}{1}$ Current Liabilities = Rs 1,75,000 Payment of Rs 30,000 to a Creditor will have two effects:

1. Decrease in Cash by Rs 30,000 and therefore Current Assets will decrease to Rs 3,20,000.

2. Decrease in Creditors by Rs 30,000 and this will decrease Current Liabilities to Rs 1,45,000. Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{3,20,000}{1,45,000} = 2.21:1$ 

### Question:10

Ratio of Current Assets 3,00,000 to Current Liabilities 2.00.000

is 1.5:1. The accountant of the firm is interested in maintaing a Current Ratio of 2:1 by paying off a part of the Current Liabilities. Compute amount of the Current Liabilities that should be paid so that the Current Ratio at the level of 2:1 may be maintained.

#### Solution:

 $Current Ratio = \frac{Current}{Current Liabilities}$ Current Assets = 1.5 1

The company is interested in maintaining the Current Ratio of 2:1 by paying off the liability.

Let the liability paid-off by the company = x

 $\therefore$  New Current Assets = 3,00,000 - x

New Current Liabilities = 2,00,000 - x

New Current Ratio =  $\frac{3,00,000-x}{2,00,000-x}$ 2  $\overline{2,00,000-x}$ or, 3,00,000 - x = 4,00,000 - 2xor, *x* = 1,00.000

Therefore, liability of Rs 1,00,000 need to be paid-off by the company in order to maintain the Current Ratio of 2 : 1.

Question:11 Ratio of Current Assets \$75,000 to Current Liabilities 350,000 is 2.5:1. The firm wants to maintain Current Ratio of 2:1 by purchasing goods on credit. Compute amount of goods that should be purchased on credit. Solution: Current Assets = Rs 8,75,000 Current Liabilities = Rs 3,50,000 Current Ratio = 2.5:1

The business is interested to maintain its Current Ratio at 2:1 by purchasing goods on credit. Let the amount of goods purchased on credit be 'x' Current Liabilities = Rs 3,50,000 + xCurrent Assets = Rs 8,75,000 + x

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\begin{array}{l} Cwrent \ Ratio \ = \ \frac{Cwrent \ Assets}{Cwrent \ Liabilities} = \ \frac{8,75,000 + x}{3,50,000 + x} = \ \frac{2}{1} \\ 8,75,000 + x = 7,00,000 + 2x \\ 8,75,000 - 7,00,000 = 2x - x \\ 1,75,000 = x \end{array}
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Therefore, goods worth Rs 1,75,000 must be purchased on credit to maintain the current ratio at 2:1.

#### Question:12

A firm had Current Assets of 5,00,000. It paid Current Liabilities of 1,00,000 and the Current Ratio became 2:1. Determine Current Liabilities and Working Capital before and after the payment was made. Solution: Firm disposed off liabilities of Rs 1.00,000 which results in decrease in current liabilities and current assets by the same amount.

After disposing liabilities: Current Assets = Rs 4,00,000 Rs5, 00, 000-Rs1, 00, 000 And, Let Current Liabilities be x-Rs1, 00,000

 $\begin{array}{l} Current \ Ratio = & \frac{Current \ Assets}{Current \ Liabilities} = & \frac{4,00,000}{x-1,00,000} = & \frac{2}{1} \\ 4,00,000 = & 2x - 2,00,000 \\ 6,00,000 = & 2x \\ Therefore, x = & 3,00,000 \end{array}$ 

Current Liabilities after payment = x - Rs 1,00,000 = Rs 2,00,000

Working Capital after Payment = Current Assets – Current Liabilities = Rs 4,00,000 – Rs 2,00,000 = Rs 2,00,000

Current Assets before payment = Rs 5,00,000 Current Liabilities before Payment = Rs 3,00,000 Therefore, Working Capital Before Payment = Current Assets – Current Liabilities = Rs 5,00,000 – Rs 3,00,000 = Rs 2,00,000

## Question:13

State giving reason, whether the Current Ratio will improve or decline or will have no effect in each of the following transactions if Current Ratio is 2:1: Cash paid to Trade Payables. Bills Payable discharged. Bills Receivable endorsed to a creditor. Payment of final Dividend already declared Purchase of Stock-in-Trade on credit. Bills Receivable endorsed to a Creditor dishonoured. g Purchases of Stock-in-Trade for cash. Sale of Fixed Assets BookValueof 5,000 for **\$**,000. Sale of Fixed Assets BookValueof 5,000 for 60.000. Solution: Let's assume Current Assets as Rs 2,00,000 and Current Liabilities as Rs 1,00,000 Current Assets Current Ratio = Current Liabilities Current Ratio= $\frac{2,00,000}{1,00,000} = 2:1$ a Cash paid to Trade Payables *sayRs*50,000 2,00,000-50,000 Current Ratio =  $\frac{1,00,000-50,000}{1,00,000-50,000}$  = 3:1 (Improve) Bills Payable discharged sayRs50,000

Current Ratio =  $\frac{2,00,000-50,000}{1,00,000-50,000} = 3:1$  (Improve)

*c* Bills Receivable endorsed to a creditor *sayRs*50,000

Current Ratio =  $\frac{2,00,000-50,000}{1,00,000-50,000}$  = 3:1 (Improve)

*d* Payment of final Dividend already declared *sayRs*50,000

Current Ratio =  $\frac{2,00,000-50,000}{1,00,000-50,000}$  = 3:1 (Improve)

e Purchase of Stock-in-Trade on credit *sayRs*50,000

Current Ratio =  $\frac{2,00,000+50,000}{1,00,000+50,000}$  = 1 .67 :1 (Decline)

fBills Receivable endorsed to a Creditor dishonoured *sayRs*50,000

Current Ratio =  $\frac{2,00,000+50,000}{1,00,000+50,000}$  = 1 .67 :1 (Decline)

g Purchase of Stock-in-Trade for cash sayRs50,000

2,00,000+50,000-50,000 Current Ratio = 1,00,000 = 2:1 (No effect)

h Sale of Fixed Assets BookvalueofRs50,000 for Rs 45,000

Current Ratio=  $\frac{2,00,000+45,000}{1,00,000}$  = 2 .45 :1 (Improve)

i Sale of Fixed Assets BookvalueofRs50,000 for Rs 60,000

2,00,000+60,000 Current Ratio = 1,00,000 = 2 .6 :1 (Improve)

## Question:14

State giving reasons, which of the following transactions would improve, reduce or not change the Current Ratio, if Current Ratio of a company is i 1:1: or ii 0.8:1:

Cash paid to Trade Payables.

b Purchase of Stock-in-Trade on credit.

Purchase of Stock-in-Trade for cash. d

Payment of Dividend payable.

Bills Payable discharged.

Bills Receivable endorsed to a Creditor.

g Bills Receivable endorsed to a Creditor dishonoured.

Solution: i Let's assume Current Assets as Rs 1,00,000 and Current Liabilities as Rs 1,00,000

Current Assets Current Ratio = Current Liabilities 1,00,000 Current Ratio =  $\overline{1,00,000}$  = 1:1

a Cash paid to Trade Payables

*sayRs*50,000

Current Ratio =  $\frac{1,00,000-50,000}{1,00,000-50,000} = 1:1$  (No change)

*b* Purchase of Stock-in-Trade on credit *sayRs*50,000

1,00,000+50,000 Current Ratio= $\frac{1,00,000+50,000}{1,00,000+50,000} = 1:1$  (No change)

c Purchase of Stock-in-Trade for cash sayRs50,000

 $= \frac{1,00,000+50,000-50,000}{1,00,000} = 1:1$ (No change) Current Ratio =

d Payment of Dividend sayRs50,000

1.00.000-50.000 Current Ratio =  $\frac{1,00,000-50,000}{1,00,000-50,000}$  = 1:1 (No change)

e Bills Payable discharged sayRs50,000

1,00,000-50,000 Current Ratio =  $\overline{1,00,000-50,000}$  = 1:1 (No change) f Bills Receivable endorsed to a Creditor sayRs50,000

Current Ratio= $\frac{1,00,000-50,000}{1,00,000-50,000} = 1:1$  (No change)

g Bills Receivable endorsed to a Creditor dishonoured sayRs50,000

Current Ratio =  $\frac{1,00,000+50,000}{1,00,000+50,000} = 1:1$  (No change)

ii Let's assume Current Assets as Rs 80,000 and Current Liabilities as Rs 1,00,000

Current Ratio = Current Assets 80,000

Current Ratio =  $\overline{1,00,000}$  = 0.8:1

*a* Cash paid to Trade Payables *sayRs*50,000

Current Ratio =  $\frac{80,000-50,000}{1,00,000-50,000}$  = 0.6:1 (Reduce)

*b* Purchase of Stock-in-Trade on credit *sayRs*50,000

Current Ratio= $\frac{80,000+50,000}{1,00,000+50,000} = 0.87:1$  (Improve)

*c* Purchase of Stock-in-Trade for cash *sayRs*50,000

Current Ratio =  $\frac{80,000+50,000-50,000}{1,00,000} = 0.8:1$  (No change)

d Payment of Dividend sayRs50,000

Current Ratio =  $\frac{\frac{80,000-50,000}{1,00,000-50,000}}{= 0.6:1$  (Reduce)

*e* Bills Payable discharged *sayRs*50,000

Current Ratio =  $\frac{80,000-50,000}{1,00,000-50,000} = 0.6:1$  (Reduce)

*f*Bills Receivable endorsed to a Creditor *sayRs*50,000

Current Ratio= $\frac{80,000-50,000}{1,00,000-50,000} = 0.6:1$  (Reduce)

g Bills Receivable endorsed to a Creditor dishonoured sayRs50,000

80,000+50,000

Current Ratio =  $\frac{1,00,000+50,000}{1,00,000+50,000} = 0.87:1$  (Improve)

Question:15

From the following information, calculate Liquid Ratio:

Particulars		Particulars	
Current Assets	2,00,000	Trade Receivables	1,10,000
Inventories	50,000	Current Liabilities	70,000
Prepaid Expenses	10,000		

# Solution:

Quick Assets or Liquid Assets = Currents Assets - Inventories - Pre-paid Expenses = Rs 2,00,000 - Rs 50,000 - Rs 10,000 = Rs 1,40,000 Current Liabilities = Rs 70,000

 $Liquid Ratio = \frac{Liquid Assets or Quick Assets}{Current Liabilities} = \frac{Rs \ 1,40,000}{Rs \ 70,000} = 2:1$ 

# Question:16

Quick Assets 1,50,000; Inventory *Stock* 40,000; Prepaid Expenses 10,000; Working Capital 1,20,000. Calculate Current Ratio. Solution:

Quick Assets = 1,50,000

Inventory = 40,000

Prepaid Expenses = 10,000

Current Assets = Quick Assets + Inventory + Prepaid Expenses

= 1,50,000 + 40,000 + 10,000 = 2,00,000

Working Capital = Current Assets - Current Liabilities

1,20,000 = 2,00,000 - Current Liabilities

Current Liabilities = 80,000

 $Current \ Ratio = \frac{Current \ Assets}{Current \ Liabilities} = \frac{2,00,000}{80,000} = 2.5:1$ 

# Question:17

Current Assets 3,00,000; Inventories 60,000; Working Capital 2,52,000. Calculate Quick Ratio. Solution: Current Liabilities = Current Assets – Working Capital

= 3,00,000 - 2,52,000 = 48,000

Quick Assets = Current Assets - Stock

= 3,00,000 - 60,000 = 2,40,000

 $Quick \ Ratio \ = \frac{Quick \ Assets}{Current \ Liabilities} = \frac{2,40,000}{48,000} = 5:1$ 

#### Question:18

Working Capital 3,60,000; Total :Debts 7,80,000; Long-term Debts 6,00,000; Inventories 1,80,000. CalcItate Liquid Ratio. Solution:

Current Liabilities = Total Debts - Long-term Debts

= 7,80,000 - 6,00,000 = 1,80,000

Current Assets = Current Liabilities + Working Capital

= 1,80,000 + 3,60,000 = 5,40,000

Quick Assets = Current Assets - Stock

= 5,40,000 - 1,80,000 = 3,60,000

 $Quick \ Ratio \ = \frac{Quick \ Assets}{Current \ Liabilities} = \frac{3,60,000}{1,80,000} = 2:1$ 

#### Question:19

Current Liabilities of a company are 6,00,000. Its Current Ratio is 3 : 1 and Liquid Ratio is 1 : 1. Calculate value of Inventory Solution:

 $Current Ratio = \frac{Current Assets}{Current Liabilities} = \frac{3}{1}$   $Acid Test Ratio = \frac{Liquid Assets}{Current Liabilities} = \frac{1}{1}$ 

Current Liabilities = 6,00,000

Current Assets = 3 × Current Liabilities

= 3 × 6,00,000 = 18,00,000

Liquid Assets = 1 × 6,00,000 = 6,00,000

Inventory = Current Assets - Liquid Assets

= 18,00,000 - 6,00,000 = 12,00,000

# Question:20

X Ltd. has a Current Ratio of 3.5 : 1 and Quick Ratio of 2 : 1. If the Inventories is 24,000; calculate total Current Liabilities and Current Assets. Solution:

Current Ratio =  $\frac{Current Assets}{Current Liabilities} = \frac{3.5}{1}$ Quick Ratio =  $\frac{Quick Assets}{Current Liabilities} = \frac{2}{1}$ Let Current Liabilities be = x Current Assets = 3.5 xQuick Assets = 2 xStock = Current Assets – Quick Assets 24,000 = 3.5 x - 2 xor, 24,000 = 1.5 x x = 16,000Current Liabilities = x = Rs 16,000Current Assets = 3.5 x = 3.5 x + 16,000 = Rs 56,000