Acco			7.1			
Illustration 1. From the following information,	compute	Current Ratio:				
Trade Receivables (Sundry Debtors) Prepaid Expenses Cash and Cash Equivalents Short-term Investments Machinery	₹ 1,00,000 10,000 30,000 20,000 7,000	Bills Payable Sundry Creditors Debentures Inventories Expenses Payable	₹ 20,000 40,000 2,00,000 40,000 40,000			
Solution: $Current Ratio = \frac{Current}{Current}$	nt Assets Liabilities	$= \frac{\stackrel{?}{\cancel{=}} 2,00,000}{\stackrel{?}{\cancel{=}} 1,00,000} = 2:1.$				
Current Assets = Trade R + Cash a	eceivables nd Cash Ec	(Sundry Debtors) + Prepaid I quivalents + Short-term Investm 00 + ₹ 30,000 + ₹ 20,000 + ₹ 4	nents + Inventories			
Current Liabilities = Trade Payables (Bills Payable + Sundry Creditors) + Expenses Payable = ₹ 20,000 + ₹ 40,000 + ₹ 40,000 = ₹ 1,00,000.						

Illustration 3.

	Calariata	C	Datio	from	the	following	information:
ĸ	alculate	(mrront	Katio	from	uie	TOTTOTTA	

Particulars	₹	₹ Particulars		
Total Assets Fixed Assets (Tangible) Shareholders' Funds		Non-current Liabilities Non-current Investments	80,000	

Solution:

Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\text{₹ 40,000}}{\text{₹ 20,000}} = 2 : 1.$$

Current Assets = ₹
$$3,00,000 - ₹ 2,60,000 = ₹ 40,000$$
.

: Current Liabilities =
$$₹ 3,00,000 - ₹ 2,80,000 = ₹ 20,000$$
.

Calculation of Current Assets and Current Liabilities

It should be noted that with the help of Current Ratio, amount of Current Assets and Current Liabilities can also be calculated if the amount of Working Capital is given.

Working Capital is the excess of Current Assets over Current Liabilities, i.e.,

Working Capital = Current Assets - Current Liabilities; or

Current Assets = Working Capital + Current Liabilities; or

Current Liabilities = Current Assets - Working Capital.

Illustration 4.

Current Ratio is 2.5; Working Capital is ₹ 60,000. Calculate the amount of Current Assets and Current Liabilities.

Solution:

Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = 2.5$$

Let Current Liabilities be
$$x$$
; Current Assets = $2.5x$

$$2.5x - x = 700,000$$

$$x = ₹ 60,000/1.5 = ₹ 40,000$$
 [Current Liabilities].

Current Assets = ₹
$$40,000 \times 2.5 = ₹ 1,00,000$$
.

Illustration 5.

Working Capital is ₹ 7,20,000; Trade Payables ₹ 40,000; Other Current Liabilities ₹ 2,00,000; calculate Current Ratio.

Solution:

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\text{₹ 9,60,000}}{\text{₹ 2,40,000}} = 4:1.$

Current Liabilities = Trade Payables + Other Current Liabilities

= ₹ 40,000 + ₹ 2,00,000 = ₹ 2,40,000.

Working Capital = Current Assets - Current Liabilities

Current Assets = Working Capital + Current Liabilities = ₹ 7,20,000 + ₹ 2,40,000 = ₹ 9,60,000.

Illustration 6.

Calculate Current Ratio from the following:

Working Capital ₹ 1,50,000; Total Liabilities (other than Shareholders' Funds) ₹ 3,25,000; Long-term Debts ₹ 2,50,000.

Solution:

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{₹ 2,25,000}{₹ 75,000} = 3 : 1.$

Current Liabilities = Total Liabilities (Other than Shareholders' Funds) - Long-term Debts

= ₹ 3,25,000 - ₹ 2,50,000 = ₹ 75,000.

Working Capital = Current Assets - Current Liabilities Current Assets = Working Capital + Current Liabilities

= ₹ 1,50,000 + ₹ 75,000 = ₹ 2,25,000.

Illustration 7.

Current Assets are ₹ 4,00,000; Inventories ₹ 2,00,000; Working Capital ₹ 2,40,000, calculate Current Ratio.

Solution:

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{₹ 4,00,000}{₹ 1,60,000} = 2.5 : 1.$

Working Capital = Current Assets - Current Liabilities

Current Liabilities = Current Assets - Working Capital = ₹ 4,00,000 - ₹ 2,40,000 = ₹ 1,60,000.

Note: Inventories are already included in Current Assets. Hence, will not be added to Current Assets.

Current Assets are ₹ 5,25,000; Inventories ₹ 2,00,000 (includes Loose Tools ₹ 75,000); Working Capital ₹ 2,25,000, calculate Current Ratio.

Solution:

 \neq 4,50,000* = 1.5 : 1. Current Assets Current Ratio = Current Liabilities = ₹ 3,00,000

Working Capital = Current Assets - Current Liabilities

Current Liabilities = Current Assets - Working Capital = ₹ 5,25,000 − ₹ 2,25,000 = ₹ 3,00,000.

*Current Assets = Current Assets - Loose Tools = ₹ 5,25,000 − ₹ 75,000 = ₹ 4,50,000.

Note: Loose Tools are excluded from Current Assets to compute Current Ratio.

Illustration 9.

A company had Current Assets of ₹3,00,000 and Current Liabilities of ₹1,40,000. Afterwards it purchased goods for ₹20,000 on credit. Calculate Current Ratio after the purchase.

Solution:

Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$
=
$$\frac{\text{₹ 3,00,000 + ₹ 20,000*}}{\text{₹ 1,40,000 + ₹ 20,000*}} = \frac{\text{₹ 3,20,000}}{\text{₹ 1,60,000}} = 2:1.$$

*Purchases of goods of ₹ 20,000 on credit results into increase in stock (i.e., Current Assets) and creditors (i.e., Current Liabilities) both by ₹ 20,000 each.

Illustration 10.

Current Liabilities of a company were ₹ 1,00,000 and its Current Ratio was 2.5 : 1. It paid ₹ 25,000 to a creditor. Calculate Current Ratio after the payment.

Solution: Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{₹ 2,25,000}{₹ 75,000} = 3 : 1.$$

Working Note: As, Current Liabilities are ₹ 1,00,000 and Current Ratio is 2.5 : 1;

∴ Current Assets = ₹ 1,00,000 × 2.5 = ₹ 2,50,000.

After payment of ₹ 25,000 to a creditor, Cash or Bank (i.e., Current Assets) and Creditors (i.e., Current Liabilities) both will reduce by ₹ 25,000 each. Thus,

Current Assets = ₹ 2,50,000 - ₹ 25,000 = ₹ 2,25,000; Current Liabilities = ₹ 1,00,000 - ₹ 25,000 = ₹ 75,000.

Illustration 11.

Ratio of Current Assets (₹ 6,00,000) to Current Liabilities (₹ 4,00,000) is 1.5:1. The accountant of the firm is interested in maintaining a Current Ratio of 2:1, by paying a part of the Current Liabilities. Compute amount of Current Liabilities that should be paid, so that Current Ratio at the level of 2:1 may be maintained.

(Delhi 2004)

Solution:

Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$
$$\frac{1.5}{1} = \frac{₹ 6,00,000}{₹ 4,00,000}$$

Let the amount paid of Current Liabilities be x

After the payment of Current Liabilities, Cash or Bank (i.e., Current Assets) and Current Liabilities both will reduce by x. Thus,

$$\frac{2}{1} = \frac{?{6,00,000-x}}{?{4,00,000-x}}$$

$$?{8,00,000-2x} = ?{6,00,000-x}$$

$$?{8,00,000-?{6,00,000}} = 2x - x$$

$$?{2,00,000} = x$$

Thus, Current Liabilities that should be paid = ₹ 2,00,000.

Illustration 12.

Ratio of Current Assets (₹ 10,00,000) to Current Liabilities (₹ 4,00,000) is 2.5 : 1. The accountant of the firm is interested in maintaining a Current Ratio of 2 : 1, by acquiring some current assets on credit. You are required to suggest him the amount of current assets that should be acquired.

Solution:

Let the amount of Current Assets acquired on credit be x

After the acquisition of Current Assets on credit, Current Assets and Current Liabilities both will increase by x. Thus,

Current Ratio =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\text{₹ 10,00,000} + x}{\text{₹ 4,00,000} + x} = 2$$

₹ 8,00,000 + 2x = ₹ 10,00,000 + x
2x - x = ₹ 10,00,000 - ₹ 8,00,000
x = ₹ 2,00,000

Thus, Current Assets that should be acquired on Credit = ₹ 2,00,000.

Illustration 13.

A firm had Current Assets of ₹ 3,00,000. It paid Current Liabilities of ₹ 60,000. After the payment, Current Ratio was 2:1. Determine Current Liabilities and Working Capital after and before the payment was made.

Solution: Let the Current Liabilities after payment of \ge 60,000 be x, which reduces cash or bank (i.e., Current Assets) by same amount. Thus,

Current Ratio =
$$\frac{\text{Current Assets (CA)}}{\text{Current Liabilities (CL)}}$$
$$\frac{2}{1} = \frac{\text{₹ 3,00,000 - ₹ 60,000}}{x}$$
$$2x = \text{₹ 2,40,000}$$

Current Liabilities after payment = ₹ 2,40,000/2 = ₹ 1,20,000

Current Liabilities before payment = ₹ 1,20,000 + ₹ 60,000 = ₹ 1,80,000

Working Capital after payment = ₹ 2,40,000 (CA) - ₹ 1,20,000 (CL) = ₹ 1,20,000. Working Capital before payment = Current Assets - Current Liabilities before payment = ₹ 3,00,000 - ₹ 1,80,000 = ₹ 1,20,000.

Effect of a Transaction on Current Ratio

In case of questions where effect of a transaction on Current Ratio is asked, following steps should be taken to determine the effect:

- 1. Assume amounts of Current Assets and Current Liabilities as per given ratio.
- 2. Put the effect of transaction in assumed amounts of Current Assets and Current Liabilities and calculate new amounts.
- 3. Calculate New Ratio and compare the New Ratio with Old Ratio to determine its effect on the Current Ratio, i.e., increase, decrease or no change in the ratio.

Illustration 14.

Current Ratio of a company is 2: 1. State giving reasons, which of the following would improve, reduce or not change the ratio:

- (i) Repayment of a current liability.
- (ii) Purchase of goods for cash.
- (iii) Sale of office equipment for ₹ 4,000 (Book value ₹ 5,000).
- (iv) Purchase of Stock-in-trade on credit.
- (v) Sale of goods ₹ 11,000 (Cost ₹ 10,000).
- (vi) Payment of dividend.

Solution:

In such questions it is better to assume amounts of Current Assets (CA) and Current Liabilities (CL). It then becomes easy to determine effect of the transaction on the ratio. Current Ratio (Given) is 2:1, let us assume CA = 20,000 and CL = 10,000.

- (i) Repayment of current liability will improve Current Ratio because fall in current asset will be less than twice the fall in current liability. will be less than twice the fall in current liability, balance would be CA = ₹ 15,000 and (Suppose ₹ 5,000 are paid for current liability, balance would be CA = ₹ 15,000 and CL = ₹ 5,000. Therefore, Current Ratio will improve to 3 : 1.)
- (ii) Purchase of goods on cash will not change the Current Ratio, neither the total current Purchase of goods on cash will not change the assets nor the total current liabilities are affected since there is only a conversion of one current asset (Cash) into another current asset (Goods).
- (iii) Sale of office equipment will improve the Current Ratio because current asset (Cash) will increase without any change in current liability.
- (iv) Both the Total Current Assets and Total Current Liabilities are increased by the same amount. Therefore, the Current Ratio will reduce.
- (v) Sale of goods for ₹ 11,000; cost being ₹ 10,000 will improve the Current Ratio because current asset (Cash or Trade Receivables) will increase by ₹ 1,000.
- (vi) Payment of dividend will reduce the total of current assets and total of current liabilities by the same amount. Therefore, the Current Ratio will improve.

Illustration 15.

Current Ratio of a company is 2:1. State giving reasons, which of the following will improve, reduce or not change the ratio:

- (i) Redemption of Debentures.
- (ii) Purchase of goods against cheque.
- (iii) Purchase of Loose Tools against cash.
- (iv) Sale of fixed asset against cheque.
- (v) Receipt of cheque from a debtor.

Solution:

(i) Redemption of Debentures will improve the Current Ratio as both Current Assets (Cash or Bank) and Current Liabilities (Other Current Liabilities) have decreased by the same amount.

Note: According to Schedule III of the Companies Act, 2013, a liability that is due for payment within 12 months from the date of Balance Sheet or within the period of Operating Cycle is shown as Current Liability.

- (ii) Purchase of goods against cheque will not change the Current Ratio as one current asset (Goods) replaces another current asset (Bank).
- (iii) Purchase of Loose Tools against cash will reduce the Current Ratio as current asset (Cash) declines while Loose Tools are not included in current asset for calculating Current Ratio.
- (iv) Sale of fixed asset against cheque will improve the Current Ratio since current asset (Bank) increases while in current liabilities there is no change.
- (v) Cheque received from a debtor will not change the Current Ratio since one current asset (Debtor) is replaced by another current asset (Bank).

Illustration 16.

The Current Ratio of a company is 2.1: 1.2. State with reasons, which of the following transactions will increase, decrease or not change the ratio:

- (i) Redeemed 9% Debentures of ₹ 1,00,000 at a premium of 10%.
- (ii) Received from debtors ₹ 17,000.
- (iii) Issued ₹ 2,00,000 Equity Shares to the vendors of Machinery.
- (iv) Accepted bills of exchange drawn by the creditors ₹ 7,000.

(OD 2015)

Illustration 23.

Inventories are ₹ 80,000; Working Capital ₹ 2,40,000; Current Assets ₹ 4,00,000; calculate Liquid/Quick Ratio.

Solution:

Liquid/Quick Ratio = $\frac{\text{Liquid/Quick Assets}}{\text{Current Liabilities}} = \frac{₹ 3,20,000}{₹ 1,60,000} = 2 : 1$ Working Capital = Current Assets - Current Liabilities

Current Liabilities = Current Assets - Working Capital

= ₹ 4,00,000 - ₹ 2,40,000 = ₹ 1,60,000.

Liquid/Quick Assets = Current Assets - Inventories

= ₹ 4,00,000 - ₹ 80,000 = ₹ 3,20,000.

Illustration 24.

Calculate Liquid Ratio/Quick Ratio/Acid Test Ratio from the following: Working Capital ₹ 1,80,000; Total Debts, *i.e.*, Outside Liabilities ₹ 3,90,000; Long-term Debts ₹ 3,00,000; Inventories ₹ 90,000.

Solution:

Liquid/Quick Ratio = $\frac{\text{Liquid/Quick Assets}}{\text{Current Liabilities}} = \frac{₹ 1,80,000}{₹ 90,000} = 2 : 1.$ Current Liabilities = Total Debts, *i.e.*, Outside Liabilities – Long-term Debts = ₹ 3,90,000 – ₹ 3,00,000 = ₹ 90,000.

Current Assets = Working Capital + Current Liabilities = ₹ 1,80,000 + ₹ 90,000 = ₹ 2,70,000

Liquid/Quick Assets = Current Assets – Inventories = ₹ 2,70,000 – ₹ 90,000 = ₹ 1,80,000.

Current liabilities of a company are ₹ 3,00,000. Its Current Ratio is 3 and Liquid Ratio is 1 Calculate value of Inventories.

Solution:

Current Liabilities =
$$₹ 3,00,000$$

Liquid Ratio = $\frac{\text{Liquid Assets}}{\text{Current Liabilities}}$; $\therefore 1 = \frac{\text{Liquid Assets}}{₹ 3,00,000}$
Liquid Assets = $₹ 3,00,000$
Current Assets = Current Ratio × Current Liabilities
= $3 \times ₹ 3,00,000 = ₹ 9,00,000$
Inventories = Current Assets - Liquid Assets
= $₹ 9,00,000 - ₹ 3,00,000 = ₹ 6,00,000$.

Illustration 26.

Current Ratio of *A* Ltd. is 4.5 : 1 and Liquid Ratio is 3 : 1. If its Inventories are ₹ 3,00,000 find out its Current Liabilities; Current Assets and Quick Assets.

Solution: Let Current Liabilities be x

Current Ratio is 4.5:1; :: Current Assets = 4.5x

Liquid Ratio is 3 : 1; :: Liquid Assets or Quick Assets = 3x

Liquid Assets = Current Assets - Inventories

or
$$3x = 4.5x - ₹ 3,00,000$$

 $1.5x = ₹ 3,00,000$

$$x = \frac{73,00,000}{15} = 72,00,000$$

Current Liabilities = ₹ 2,00,000.

Current Assets = ₹ 2,00,000 ×
$$4.5 = ₹ 9,00,000$$
.

Quick Assets = Current Assets – Inventories
= ₹
$$9,00,000 - ₹ 3,00,000 = ₹ 6,00,000$$

= ₹ 2,00,000 (Current Liabilities) × 3 = ₹ 6,00,000.

Illustration 27.

Quick Ratio 1.5; Current Assets ₹ 1,00,000; Current Liabilities ₹ 40,000. Calculate value of Inventories (Stock).

Solution:

Quick Ratio =
$$\frac{\text{Quick Assets}}{\text{Current Liabilities}} = \frac{\text{Quick Assets}}{₹ 40,000} = 1.5$$

Quick Assets = ₹ $40,000 \times 1.5 = ₹ 60,000$.

Calculation of Inventories (Stock):

Inventories = Current Assets – Quick Assets = ₹
$$1,00,000 - ₹ 60,000 = ₹ 40,000$$
.

Illustration 28.

A firm has Current Ratio of 4:1 and Quick Ratio of 2.5:1. Assuming Inventories are ₹ 22,500, find out total Current Assets and total Current Liabilities.

Solution: Calculation of Current Assets and Current Liabilities:

Let Current Liabilities (CL) be x

Let Current Ratio is 4: 1, hence Current Assets = 4x

Curick Ratio is 2.5 : 1, hence Liquid Assets or Quick Assets = 2.5x

Quick Assets + Inventories = Current Assets

$$2.5x + ₹ 22,500 = 4x$$

or or

$$1.5x = 72,500$$

$$x = \frac{\text{₹ 22,500}}{1.5} = \text{₹ 15,000}$$

Current Liabilities = ₹ 15,000; Thus,

Current Assets = ₹ 15,000 × 4 = ₹ 60,000.

Illustration 29.

Working Capital of a company is ₹ 6,00,000. Its Current Ratio is 2.5 : 1. Calculate value of (i) Current Liabilities, (ii) Current Assets, and (iii) Liquid Ratio/Quick Ratio/Acid Test Ratio, assuming Inventories of ₹ 4,00,000.

Solution:

Current Ratio = 2.5 : 1 (Given)

Let Current Liabilities = x

then,

Current Assets = 2.5x

Working Capital = Current Assets - Current Liabilities

₹ 6,00,000 = 2.5x - x

₹ 6,00,000 = 1.5x

Therefore,

(i) Current Liabilities
$$(x) = \frac{\text{₹ 6,00,000}}{1.5} = \text{₹ 4,00,000}.$$

(ii) Current Assets =
$$₹ 4,00,000 \times 2.5 = ₹ 10,00,000$$
.

(iii) Liquid Ratio/Acid Test Ratio =
$$\frac{\text{Quick Assets}}{\text{Current Liabilities}} = \frac{\text{₹ 6,00,000}}{\text{₹ 4,00,000}} = \textbf{1.5 : 1}.$$

Quick Assets = Current Assets - Inventories = ₹ 10,00,000 - ₹ 4,00,000 = ₹ 6,00,000.

Illustration 30.

Current Assets of a company are ₹ 17,00,000. Its Current Ratio is 2.50 and Liquid Ratio is 0.95. Calculate Current Liabilities, Liquid Assets and Inventory.

Solution:

Current Liabilities =
$$\frac{? 17,00,000}{2.5} = ? 6,80,000.$$

Liquid Ratio =
$$\frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{\text{Liquid Assets}}{₹6,80,000} = 0.95$$

Liquid Assets = ₹
$$6.80,000 \times 0.95 = ₹ 6.46,000$$
.

Inventory = Current Assets – Liquid Assets = ₹
$$17,00,000 - ₹ 6,46,000 = ₹ 10,54,000$$
.