

**Dr.Babasaheb Ambedkar Open University**



**DAA**  
**DIPLOMA IN ADVANCE**  
**ACCOUNTING**

**Block**

**2**

**Analytical Accounting**

**Unit – 3**

Fund Flow Statements 4

**Unit – 4**

Cash Flow Statement 15

**Unit – 5**

Ratio Analysis 90

## **AUTHORS**

1) **Shri Urvish B.Shah**  
(M.Com.C.A) I-6, Bhavna Flats,  
Narayan Nagar Road, Paldi,  
Ahmedabad- 07.

2) **Shri Milan Shah**  
(B.Com. C.A) 23, Amul Society,  
Sharda Nagar Road,  
Paldi, Ahmedabad-07.

3) **Shri Mihir D. Khatri**  
(B.Com.LLB. C.A) D1/44, Arjun Tower,  
Nr. C.P.Nagar, Ghatlodia,  
Ahmedabad.

4) **Shri Nirav Parikh**  
(B.Com. C.A) 3, Ratna Jyot flates,  
Opp. Opera Society,  
New Sharda Mandir Road  
Paldi, Ahmedabad-7.

5) **Shri Hareshkumar B. Vadhel**  
(M.Com. M.Ed.) B/3-401, Vishwas App.  
Sola Road,  
Opp. Gulab Towar,  
Ahmedabad.

## **CONTENT EDITOR**

6) **Shri Ketul Shah**  
(B.Com.C.A.) I-1,Bhavna Flats,  
Narayan Nagar Road, Paldi,  
Ahmedabad- 07.

## **LANGUAGE EDITOR**

7) **Shri Digvijay Gohil**  
(M.A. M.Phil.) B-3/401, Vishvash Flats,  
Sola Road, Nr. Gulab Tower  
Ahmedabad.

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Further information on the Dr.Babasaheb Ambedkar Open University courses may be obtained from the University's office at Govt. Bunglows, No-9. Dafnala, Shahibaug, Ahmedabad – 380003. Ph : (o) : 22869690, Fax : 22869691

## **Unit : 3 : Fund Flow Statements**

### **Introduction**

Information related to body corporates are presented in financial statements prepared by the body corporates. Such information are used by wide variety of people like shareholders, governments, creditors etc. So, attempt should be made to provide as much information as possible. The two conventional or traditional financial statements published by the body corporates in their annual accounts are Profit and Loss Account or Revenue Statement, showing the results of the year's trading and the Balance Sheet or the Position Statement disclosing the monetary position of the enterprise. Though the traditional system provides information related with the profits or losses of the business and balance sheet provides the states of current affairs, readers must also be provided with the information related with the funds available during the year from various sources as well as the uses of such funds in the business. This information may be obtained by preparing a statement of source and application of funds.

## **Structure of the Chapter :**

- 3.1      Objectives**
- 3.2      Meaning Of 'Fund'**
- 3.3      Preparation Of Fund Flow Statement**
- 3.4      Utility Of Funds-Flow Statement**
- 3.5      Preparing Fund Flow Statement**
- 3.6      Statement Of Changes In Working Capital**
- 3.7      Some Important Points**
- 3.8      Adjusted Profit And Loss Account**
- 3.9      Exercise**

### **3.1      Objectives:**

By the end of this chapter the student will learn to know about

- The concept of fund flow statement
- Preparation of fund flow statement
- Utility of fund flow statement

### **3.2      Meaning Of 'Fund'**

In normal sense, funds mean "Net working capital." For example when services are purchased on credit, the creditors increase. This affects working capital. Hence 'Funds' have been affected by such services taken. If payments had to be made in cash for the services, then cash would have been reduced or declined and to that extent working capital might have been reduced or affected. In short.

"When liabilities increase, it is a Source of Fund;

When assets increase, it is an Application of Funds."

As well as,

"When liabilities decrease, it is an application of funds;

When assets decrease, it is a Source of fund."

A summarized list of source and application of funds is given below, but this list is not exhaustive in which we can add many things.:

**Source of Funds:**

- (i) Increase in Capital
- (ii) Borrowing or incurring any liability
- (iii) Profit from operation of business
- (iv) Sale of fixed assets or investments

It is seen from this list that funds flow in when there is an increase in a liability or when there is a reduction in an asset.

**Application or Usages of Funds :**

- (i) Purchase of fixed assets
- (ii) Purchase of investments
- (iii) Repayment of Capital
- (iv) Repayment of loans or debentures
- (v) Payment of cash dividends

### **3.3 Preparation Of Fund Flow Statement**

Fund flow statement may be prepared in two ways. It may be in the T-shaped form or horizontal form or accounting form, where the sources of funds are shown on the left hand side and application of funds appears on the right hand side. Secondly, it may be in a vertical form or in the form of a statement. However, the technique of preparing vertical statement is more popular among the people, in which sources are shown in the beginning and in the later part of the statement, the application of funds is set out.

For preparing a fund flow statement, the balance sheets for at least two consecutive years are required. The rule is that the sources or applications of the funds will be affected only when any of the current assets or liabilities are affected due to any transactions.

The effects of increases or decreases in the different items of assets and liabilities on the funds will then be determined. Secondly, details from Profit and Loss Account are also required to determine the effect of operations carried out during the year, e.g. operating profit as a source of funds.

By comparing the opening and closing balances of assets and liabilities, the net effect is determined and which will be taken in to consideration for the purpose of preparation of fund flow statement, e.g. while preparing funds statements for 1997 the balances of assets and liabilities in the balance sheets for 1996 and 1997 are used and compared. If the furniture account shows debit balance of Rs. 90,000 on 31-12-96 and the same appears at Rs. 1,80,000 on 31-12-97, it indicates that the funds have been applied to the extent of Rs. 90,000 in purchase of furniture.

Following is the Performa fund flow statement:

**Fund-Flow Statement**  
 (Statement of Sources and Application of Funds)

(Horizontal Form)

Sources	Rs.	Application	Rs.
1. Increase in Share Capital		1. Purchase of Fixed Assets	
2. Operation of business (i.e. profit)		2. Purchases of Investment	
3. Issue of debentures		3. Payment of Dividend	
Loan borrowed		4. Taxes paid	
4. Sale of Fixed Assets		5. Payment of Debentures	
5. Sale of Investments		6. Payment of Bank Loan	
6. Decrease in Working Capital		7. Increase in Working Capital	
Capital			

**Vertical Form : Fund-Flow Statement**

(Statement of Sources and Application of Funds)

	Rs.	Rs.
<b>Sources of Funds :</b>		
1. Increase in Share Capital		.....
2. Operation of business (i.e. Profit)		.....
3. Issue of Debentures or Loan borrowed		.....
4. Sale of Fixed Assets		.....
5. Sale of Investments		.....
6. Decrease in Working Capital		.....
Total		
<b>Application or use of Funds :</b>		
1. Purchases of Fixed Assets		
2. Purchase of Investments		.....
3. Payment of Dividend		.....
4. Taxes paid		.....
5. Repayment of Debentures		.....
6. Repayment of Bank Loan		.....
7. Increase in Working Capital		
Total	.....	.....

### 3.4 Utility Of Funds-Flow Statement

There are many uses of preparation of profit and loss account and balance sheet but on the other side, there are certain limitations of balance sheet and profit and loss accounts which are the conventional or traditional financial statements. Both of them unable to show clearly what funds have come in and where funds have been applied during a specific time period. So, they are not showing from what sources the funds were acquired and where they were applied during a specific time period. If we consider the users of such financial statements, the two traditional financial statements are mainly meant for the use of outsiders whereas the Fund-flow Statements provide useful information and guidance to management. Management will come to know about from what sources the funds were generated and where they were applied during this time period. If we consider other uses of fund flow statements, when funds have to be borrowed from bankers or others they have to be supplied with numerous details regarding credit worthiness of the business or enterprise. Financial manager or the owner of the business is enabled to provide necessary information on the basis of projected funds statement. By preparing a fund flow statement, they will be able to show that, what funds are to be borrowed, when they would be needed, when would the loan be returned and how the funds would be generated for repayment etc. and on the other side these question may be of concern by the banker or the loan provider which must be answered and that would be answered with the help of this statement. The Profit and Loss Account may present a very rosy picture of profitability year after year and yet the liquid position may be going from bad to worse. This reality is explained by the Fund-flow Statement, as it would readily explain as to what has become of net profits.

### 3.6 Statement Of Changes In Working Capital

In preparation of fund flow statement, the key role will be played by the working capital. Fund flow statements are mainly affected by working capital and so its effects must be presented in the fund flow statement. Usually, a separate statement is prepared for showing the changes in the working capital. The working capital is the excess of current assets over current liabilities. Hence only current assets and current liabilities are shown in the statement showing changes in working capital.

While preparing this separate statement, it should be noted that by deducting current liabilities from current assets working capital is obtained.

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Moreover, the rule is that, working capital decreases if there is any decrease in current assets. Conversely, working capital decreases if there is any increase in current liabilities and increase if there is any decrease in current liabilities.

A Performa working capital statement is given below:

#### Statement Of Changes In Working Capital

	Previous Year Rs.	Current Year Rs.	Working Increase Rs.	Capital Decrease

				Rs.
Current Assets :				
Stock				
Debtors				
Bills Receivable				
Cash & Bank Balance				
Prepaid Expenses				
Total Current Assets :	(a)			
Current Liabilities :				
Trade Creditors				
Bills Payable				
Unpaid Expenses				
Total Current Liabilities	(b)			
Working Capital (a-b)				
Increase (or decrease) in				
Working Capital				

The technique is explained below with the help of an illustration.

**Illustration:** The following are the comparative balance sheets of Swaroopchand Ltd. as on 31st March, 2000 and 2001 :

**Balance Sheets**

Liabilities	31-3-2000 Rs.	31-3-2001 Rs.	Assets	31-3-2000 Rs.	31-3-2001 Rs.
Share Capital	5,10,000	6,50,000	Fixed Assets :		
Reserves & Surplus	2,10,000	2,40,000	Land & Buildings	2,90,000	3,10,000
Debentures	4,00,000	4,00,000	Machinery	8,00,000	10,20,000
Current Liabilities :			Current Assets :		
Trade Creditors	1,55,000	1,70,000	Stock	2,20,000	2,70,000
Creditors for- Expenses			Debtors	2,20,000	1,20,000
Expenses	30,000	30,000	Cash	80,000	1,10,000
Provision for					

Doubtful Debts	15,000	13,000			
Provision for					
Depreciation	2,90,000	3,27,000			
	16,00,000	18,30,000		16,00,000	18,30,000

**Schedule of Changes in Working Capital**

Particulars	31st March		Changes in Working Capital	
	2000 Rs.	2001 Rs.	Increase Rs	Decrease Rs.
Current Assets :				
Stock	2,20,000	2,70,000	40,000	
Debtors	2,20,000	1,20,000		1,00,000
Cash	80,000	1,10,000	30,000	
	5,10,000	5,00,000		
Current Liabilities :				
Creditors	1,55,000	1,70,000		15,000
Creditors for Expenses	30,000	30,000		
Provision for Doubtful Debts	15,000	13,000	2,000	
	2,00,000	2,13,000		
Working Capital	3,10,000	2,87,000		
Decrease in Working Capital		33,000		
	3,20,000	3,20,000	1,15,000	1,15,000

Increase in working capital = Application of funds.

Decrease in working capital = Source of funds.

**Statement Showing Source and Application of Funds (2000-2001)**

	Rs.	Rs.
Sources of Funds :		
Issue of Share Capital	1,40,000	
Additions to Reserve	30,000	
Provision for Depreciation	37,000	
Decrease in Working Capital (As per statement)	33,000	2,40,000
Application of Funds :		

Additions to Land & Buildings	2,20,000	
Additions to Machinery	20,000	2,40,000

### 3.8 ADJUSTED PROFIT AND LOSS ACCOUNT

While preparing fund flow statement, we have to discuss about the various sources and application of funds during the year. The most important source of funds is the profit earned in the course of business, that is the profit generated from the year's operation. For the purpose we can not consider the net profit shown by the Profit and Loss Account as it does not indicate the correct sum of funds generated due to trading. To get the real funds generated from the operation, we have to make certain adjustments on the profit and loss account. There are certain debits which must be added back to the net revenue shown by the Profit and Loss Account, which mainly includes non cash expenses like depreciation, profit or loss on sale of asset, provision for taxation, proposed dividend etc.

For better understanding and preparation as well as for ascertaining the correct cash profits, it is necessary to prepare adjusted profit and loss account which nullify the effects of non cash revenues and non cash expenses. Following is the Performa adjusted profit and loss account.

**Adjusted Profit and Loss Account**

	Rs.		Rs.
To Depreciation written off during the year		By Opening Balance of P & L Appro. A/c	
“ Preliminary Expenses written off		“ Profit on Sale of Fixed Asset	
Goodwill written off		“ Adjusted Profit	
“ Loss on Sale of Fixed Assets		i.e. Funds from operations (Balancing figure)	
“ Provision for Taxation			
“ Proposed Dividend			
“ Transfer to General Reserve			
Closing Balance			

Following illustration will explain about the preparation of fund flow statement but students should keep in mind that this illustration is given just for the understanding of the students and practical aspects will not be asked in the examinations from this chapter.

#### Illustration:

Prepare statements showing following details from the Balance Sheets and other details given below of the Neha Ltd.

- (1) Changes in Working Capital (2) Sources and Application of Funds.

**Balance Sheets**

Liabilities	31-3-2000	31-3-2001	Assets	31-3-2000	31-3-2001
	Rs.	Rs.		Rs.	Rs.
Share Capital	4,50,000	4,50,000	Plant and Machinery	4,00,000	3,20,000
General Reserve	3,00,000	3,10,000	Investments	50,000	60,000
Profit & Loss A/c	30,000	35,000	Stock	2,00,000	1,95,000
Capital Reserve	26,000	33,000	Bills Receivable	40,000	15,000
Debentures	—	2,70,000	Debtors	2,10,000	4,55,000
Creditors	90,000	75,000	Bank Balance	1,59,000	1,97,000
Bills Payable	78,000	59,000			
Provision for Taxation	85,000	10,000			
	10,59,000	12,42,000		10,59,000	12,42,000

Other details are as follows :

- (1) During the year investments worth Rs. 8,000 were sold at a price of Rs. 8,500 and new investment worth Rs. 18,000 was purchased.
- (2) Net profit of the year was Rs. 62,000 after debiting the depreciation of Rs. 70,000 on Plant and Machinery and Rs. 10,000 Provision for Taxation.
- (3) During the year Plant and Machinery worth Rs. 10,000 were sold at a price of Rs. 12,000 and the profit on the like was credited to Profit and Loss Account.
- (4) During the year Rs. 40,000 were paid as Dividend.

**Solution :**

**Schedule of Working Capital**

	31st March		Change in W. Cap.	
	2000 Rs.	2001 Rs.	Increase Rs.	Decrease Rs.
<b>Current Assets :</b>				
Stock	2,00,000	1,95,000		5,000
Bills Receivable	40,000	15,000		25,000
Debtors	2,10,000	4,55,000	2,45,000	—
Bank Balance	1,59,000	1,97,000	38,000	—
	6,09,000	8,62,000		
<b>Current Liabilities :</b>				

Creditors	90,000	75,000	15,000	-
Bills Payable	78,000	59,000	19,000	-
	1,68,000	1,34,000		
<b>Working Capital :</b>	<b>4,41,000</b>	<b>7,28,000</b>		
<b>Increase in Working Capital</b>	<b>2,87,000</b>			<b>2,97,000</b>
	<b>7,28,000</b>	<b>7,28,000</b>	<b>3,27,000</b>	<b>3,27,000</b>

Let us now find out necessary figures for preparing Fund-Row Statement.

(1) There is a profit of Rs. 500 on sale investments which can be seen from following account :

**Investment Account**

	Rs.		Rs.
To Balance b/d	50,000	By Cash-sales	8,500
“ Profit on Sale (?)	500	“ Balance c/d	60,000
“ Cash-purchases	18,000		
	68,500		68,500

(2) Profit of Rs. 2,000 on sale of fixed assets can be verified from the following account:

**Fixed Assets Account**

	Rs.		Rs.
To Balance b/d	4,00,000	By Depreciation	70,000
“ Profit on Sale (?)	2,000	“ Cash-Sale	12,000
		“ Balance c/d	3,20,000
	4,02,000		4,02,000

**Provision for Taxation Account**

	Rs.		Rs.
To Cash : Taxes paid (?)	85,000	By Balance b/d (Previous year)	85,000
“ Balance c/d	10,000	“ Profit and Loss A/c.	
		-current year's provision	10,000
	95,000		95,000

(2) The inflow of funds from trading can be ascertained by preparing Adjusted Profit and Loss Account as under :

### Adjusted Profit & Loss Account

	Rs.		Rs.
To Depreciation	70,000	By Balance b/d	30,000
“ Dividend	40,000	“ Profit on sale of	
“ Provision for Taxation	10,000	Fixed assets	2,000
General Reserve	7,000	“ Profit on Investments	500
“ Balance c/d	35,000	“ Profit (Showing source of funds)	1,39,500
	1,72,000		1,72,000

### Statement of Sources and Application of Funds

	Rs.	Rs.
Sources of Funds :		
Profit	1,39,500	
Sale Proceeds of Investments	8,500	
Sale Proceeds of Fixed Assets	12,000	
Debentures issued	2,70,000	4,30,000
Application of Funds :		
Increase in Working Capital	2,87,000	
Purchase of Investments	18,000	
Payment of Dividend	40,000	
Payment of Taxes	85,000	4,30,000

### 3.9 Exercise

1. Define Fund and describe the concept of fund flow statement?
2. Write a short note on the various accounts needed to prepare fund flow statement?
3. Describe the utility of fund flow statement?

## **Unit : 4 : Cash Flow Statement**

### **Introduction**

It is difficult to predict the running of any business without having enough cash in the business. A business can not survive for a long period of time in the absence of liquidity, even if it has high profitability. All business dealings ultimately result into cash inflow or cash outflow, irrespective of transaction, it may be of capital nature or revenue nature. Hence, a statement that shows cash flow is considered to be an important one because only such type of statement can indicate from what sources cash have been generated during the year and where such cash is applied. The cash on hand should not be excessive or more than what is needed, otherwise the cash would remain idle or useless, reducing the over all profitability of the business. The fund flow statement shows the changes in the net working capital, while the cash flow statement shows the inflow and outflow of cash only. The statement shows the sum of cash received and cash paid due to each transaction of business. The total cash inflow is added to the opening balance of cash and the total cash outflow deducted there from. These statement shows different activities like operating activities, financial activities and investing activities from which cash inflow is generated and cash outflow has made. Now a days this statement has gained status of primary, important and compulsory financial statement for body corporate. As explained in the earlier chapter Accounting Standards, the ICAI has also issued accounting standard AS-3 which gives directions in preparation of Cash Flow Statements.

## **Structure of the Chapter:**

- 4.1 Objectives**
- 4.2 Sources Of Cash Inflows And Cash Outflows**
- 4.3 Affect Of Non-Cash Items On Profit**
- 4.4 Cash Flow From Fixed Assets And Liabilities**
- 4.5 Specimen Of Cash Flow Statement**
- 4.6 Difference Between Cash Flow And Fund Flow Statements**
- 4.7 Utility Of Cash Flow Statement**
- 4.8 Limitations Of Cash Flow Analysis**
- 4.9 Accounting Standard-3**
- 4.10 Exercise**
- 4.11 Practical**
- 4.12 Practical Exercise**

### **4.1 Objectives:**

By the end of this chapter the student will learn to know about

- Understanding of cash flow statement
- Utilities and limitations of cash flow statements
- Application of AS- 3

### **4.2 Sources of Cash Inflows and Cash Outflows**

Here, we shall consider and talk about the various inflows and outflows involving cash. The most important source of cash inflow is that which is generated by business operations. This mainly includes two items (1) Profit from operations and (ii) Cash flow from changes in current assets and current liabilities.

**Operating Profit:** Operating profit we can derive by making certain adjustment on the profit shown in profit and loss account. Profit from business operations, even though generate cash, but it is not the cash profit, to acquire cash profit certain adjustments will have to be made for non-cash items like depreciation. The adjustments for non cash items, we have already discussed in the chapter of fund flow statements. In order to determine the net cash inflow due to operations, the non-cash items debited must be added back to the profit. Depreciation is the most important of such items.

**Changes in Current Assets and Liabilities:** Cash flow is affected due to changes in current assets,

From this, we may say that

Cash flow decreases due to increase in current assets

Cash flow increases due to decrease in current assets

Increase in current liabilities increases cash flow

Decrease in current liabilities decreases cash flow.

#### 4.3 Effect of Non-Cash Items on Profit:

In preparing cash flow statement, we have to consider the cash generated from the profit and loss and so for the purpose, various non cash items may be there in the profit and loss statements. It is necessary to nullify the effect of such non cash items. For the purpose, certain adjustments will have to be made in profit and loss account. Following are the vertical and horizontal presentation of the statements of cash profit or loss of the period.

##### A Statement Showing Cash from Operation (Vertical form)

	Rs.
Closing Balance of P & L A/c	.....
<i>Add :</i> (1) Depreciation	.....
(2) Intangible assets written off e.g. goodwill	.....
(3) Fictitious asset written off	.....
(4) Provision for taxation	.....
(5) Appropriation of profit e.g. Proposed dividend, Transfer to General Reserve	.....
(6) Loss on sale of fixed asset	.....
<i>Deduct :</i> (1) Profit on sale of fixed asset	.....
(2) Sum written back from General Reserve	.....
<i>Less :</i> Opening balance of P & L A/c	.....
Cash inflow during the year due to profit :	.....

Such cash flow from operation can be ascertained even by preparing an account which can be treated as the horizontal presentation.

##### Adjusted Profit and Loss Account

	Rs.			Rs.
(1) To Depreciation	.....	(1)	By Opening Balance of	.....
(2) " Goodwill written off	.....		P and L A/c	

(3)		.....	(2)	“ Profit on Sale of Fixed Asset	.....
	“ Preliminary Expenses written off	.....	(3)	“ Sum written back from	.....
(4)	“ Provision for Taxation	.....		General Reserve	
(5)	“ Transfer of General Reserve	.....	(4)	“ Cash inflow from Net Profit (?)	.....
(6)	“ Proposed Dividend	.....			
(7)	“ Loss on Sale of Fixed Assets	.....			
(8)	“ Closing Balance of P & L A/c	.....			

#### 4.4 Cash Flow From Fixed Assets And Liabilities :

Cash flows may be generated even from the assets or the liabilities, which includes mainly the following items.

##### (a) Cash Receipts (Cash Inflow) :

- (1) Sale of Fixed Assets
- (2) Sale of Investments
- (3) Bank Loan

##### (b) Cash Payments (Cash Outflow) :

- (1) Purchase of Fixed Assets
- (2) Payment of Dividend
- (3) Payment of Taxes

#### 4.5 Specimen Of Cash Flow Statement :

From the discussion about cash inflows and cash outflows above, the Statement of Cash Flow can be prepared as follows :

##### Cash Flow Statement (for the year ended 31-3-1999)

	Rs.	Rs.
Cash balance in the beginning (1-4-'98)		.....
<i>Add : Cash Inflows :</i>		
(1) Cash from operations ;	.....	

(2) Sale of fixed assets	.....	
(3) Issue of shares or debentures	.....	
(4) Receipts from Long term loan	.....	
(5) Sale of Investments		.....
<i>Less : Outflows of Cash :</i>		.....
(1) Purchase of fixed assets	.....	
(2) Repayment of loan	.....	
(3) Payment of taxes	.....	
(4) Payment of dividend	.....	
(5) Drawings by Proprietor or Partners	.....	
(6) Cash lost in operations		.....
<b>Cash Balance at the end : (31-3-99) :</b>		

#### 4.6 Difference Between Cash Flow And Fund Flow Statements

We have so far studied both fund flow and cash flow statements, from which we are able to present the following points of difference :

As per Companies Act, preparation and presentation of cash flow statement is compulsory for every body corporates which is listed on stock exchanges or whose turnover is above 50 crores, where as the preparation of funds flow statement is not compulsory, though it is in the interest of the body corporate to make a fund flow statement. Cash flow statement considers changes in cash position only during the year, while fund flow statement considers the changes in the working capital.

While ascertaining funds from operations in the fund flow statement, we prepare Adjusted Profit and Loss Account. While for the purpose of cash flow statement, to ascertain funds from operations, we take into account the cash flow from changes in current assets and current liabilities also.

#### 4.7 UTILITY OF CASH FLOW STATEMENT

As we have seen, cash flow statement is useful to management about their planning of liquidity in short run. Moreover, presentation of cash flow statement will help and facilitate in getting loans from banks and financial institutions. Moreover, the management can plan out various outflows or payments of dividend, repayment of long term loans etc. if it has good idea about the timing when enough cash will be on hand.

It is also useful for the better management of cash receipts and cash payments. If the finance manager has a clear idea of cash receipts and payments, cash resources can be effectively and efficiently managed. Excess cash found at any time may be profitably invested for the time being and profitability is increased.

#### **4.8 LIMITATIONS OF CASH FLOW ANALYSIS :**

Following limitations of cash flow statement must also be taken into consideration :

Cash flow statement shows only cash position of the past and not for the future unless we make a projected cash flow statement and as we know that past, we can not change. The cash flow statement fails to give any idea about the profitability of the business. The business may have earned handsome profits, but it may not have enough cash on hand to pay its liabilities. Similarly, there may be loss in the business and yet there may be a large balance of cash on hand and so such kind of situations can not be explained by the cash flow statements. Cash flow statement thus cannot take the place of profit and loss account.

The actual cash balance shown by the cash flow statement does not always show the true liquid position of business. Many factors affect the preparation of cash flow statement.

#### **4.9 Accounting Standard-3**

Accounting Standard – 3, issued by Institute of Chartered Accountants of India, deals with the preparation, presentation and understanding of the Cash Flow Statement, we have already discussed in the previous chapter still for the better understanding of the students same is reproduced below.

##### **Accounting Standard - 3 (As 3) Cash Flow Statements**

The following is the text of the revised Accounting Standard (AS) 3, 'Cash Flow Statements', issued by the Council of the Institute of Chartered Accountants of India. This Standard supersedes Accounting Standard (AS) 3, 'Changes in Financial Position', issued in June 1981.

In the initial years, this accounting standard will be recommendatory in character. During this period, this standard is recommended for use by body corporates listed on a recognized stock exchange and other commercial, industrial and business enterprises in the public and private sectors.

##### **Objective**

Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assets the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation.

The Statement deals with the provision of information about the historical changes in cash and cash equivalents of an enterprise by means of a cash flow statement which classifies cash flows during the period from operating, investing and financing activities.

##### **Scope**

An enterprise should prepare a cash flow statement and should present it for each period for which financial statements are presented.

As revised and published in *The Chartered Accountant*, March 1997. The Standard was originally issued in June 1981 and was titled 'Changes in Financial

Position'.

Users of an enterprise's financial statements are interested in how the enterprise generates and uses cash and cash equivalents. This is the case regardless of the nature of the enterprise's activities and irrespective of whether cash can be viewed as the product of the enterprise, as may be the case with a financial enterprise. Enterprises need cash for essentially the same reasons, however different their, principal revenue producing activities might be. They need cash to conduct their operations, to pay their obligations, and to provide returns to their investors.

### **Benefits of Cash Flow Information :**

A cash flow statement, when used in conjunction with the other financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency) and its ability to affect the sums and timing of cash flows in order to adapt to changing circumstances and opportunities. Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. It also enhances the comparability of the reporting of operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events.

Historical cash flow information is often used as an indicator of the sum, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices.

### **Definitions :**

*The following terms are used in this Statement with the meanings specified :*

**Cash** comprises cash on hand and demand deposits with batiks.

**Cash equivalents** are short term, highly liquid investments that are readily convertible into known sums of cash and which are subject to an insignificant risk of changes in value.

**Cash flows** are inflows and outflows of cash and cash equivalents.

**Operating activities** are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities.

**Investing activities** are the acquisition and disposal of long-term assets and other investments not involved in cash equivalents.

**Financing activities** are activities that result in changes in the size and composition of the owners' capital (including preference share capital in the case of a body corporate) and borrowings of the enterprise.

### **Cash and Cash Equivalents**

Cash equivalents are held for the purpose of meeting short-term cash commitments- rather than for investment or other purposes. For an investment to qualify as cash equivalent, it must be readily convertible to a known sum of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when -it has a short maturity of, say, three months or less from the date of acquisition. Investments in shares are excluded

from cash equivalents unless they are, in substance, cash equivalents; for example, preference shares of a body corporate acquired shortly before their specified redemption date (provided there is only an insignificant risk of failure of the body corporate to repay the sum at maturity).

Cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

#### **Presentation of a Cash Flow Statement :**

The cash flow statement should report cash flows during the period classified by operating, investing and financing activities.

An enterprise presents its cash flows from operating, investing and financing activities in a manner which is most appropriate to its business. Classification by activity provides information that allows users to assess the impact of those activities on the financial position of the enterprise and the sum of its cash and cash equivalents. This information may also be used to evaluate the relationships among those activities.

A single transaction may include cash flows that are classified differently. For example, when the installment paid in respect of fixed asset acquired on deferred payment basis includes both interest and loan, the interest element is classified under financing activities and the loan element is classified under investing activities.

#### **Operating Activities :**

The sum of cash flows arising from operating activities is a key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to maintain the operating capability of the enterprise, pay dividends, repay loans and make new investments without recourse to external sources of financing. Information about the specific components of historical operating cash flows is useful, in conjunction with other information, in forecasting future operating cash flows.

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the enterprise. Therefore, they generally result from the transactions and other events that enter into the determination of net profit or loss. Examples of cash flows from operating activities are :

- (a) cash receipts from the sale of goods and the rendering of services;
- (b) cash receipts from royalties, fees, commissions and other revenue;
- (c) cash payments to suppliers for goods- and services;
- (d) cash payments to and on behalf of employees;
- (e) cash receipts and cash payments of an insurance enterprise for premiums and claims, annuities and other policy benefits;
- (f) cash payments or refunds of revenue taxes unless they can be specifically identified with financing and investing activities; and
- (g) cash receipts and payments relating to futures contracts, forward contracts, option contracts and swap contracts when the contracts are

held for dealing or trading purposes.

Some transactions, such as the sale of an item of plant, may give rise to a gain or loss which is involved in the determination of net profit or loss. However, the cash flows relating to such transactions are cash flows from investing activities.

An enterprise may hold securities and loans for dealing or trading purposes, in which case they are similar to inventory acquired specifically for resale. Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. Similarly, cash advances and loans made by financial enterprises are usually classified as operating activities since they relate to the main revenue-producing activity of that enterprise.

#### **Investing Activities :**

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future revenue and cash flows. Examples of cash flows arising from investing activities are :

- (a) cash payments to acquire fixed assets (including intangibles). These payments include those relating to capitalized research and development costs and self-constructed fixed assets;
- (b) cash receipts from disposal of fixed assets (including intangibles);
- (c) cash payments to acquire shares, warrants or debt instruments of other enterprises and interests in joint ventures (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purposes);
- (d) cash receipts from disposal of shares, warrants or debt instruments of other enterprises and interests in joint ventures (other than receipts from those instruments considered to be cash equivalents and those held for dealing or trading purposes);
- (e) cash advances and loans made to third parties (other than advances and loans made by a financial enterprise);
- (f) cash receipts from the repayment of advances and loans made to third parties (other than advances and loans of a financial enterprise);
- (g) cash payments for futures contracts, 'forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the payments are classified as financing activities; and
- (h) cash receipts from futures contracts, forward contracts, option contracts and swap contracts except when the contracts are held for dealing or trading purposes, or the receipts are classified as financing activities.

When a contract is accounted for as a hedge of an identifiable position, the cash flows of the contract are classified in the same manner as the cash flows of the position being hedged.

#### **Financing Activities :**

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of funds (both capital and borrowings) to the enterprise. Examples of cash flows arising from financing activities are :

- (a) cash proceeds from issuing shares or other similar instruments;
- (b) cash proceeds from issuing debentures, loans, notes, bonds and other short or long-term borrowings; and
- (c) cash repayments of sums borrowed.

Reporting Cash Flows from Operating Activities :

*An enterprise should report cash flows from operating activities using either*

- (a) *the direct technique, whereby major classes of gross cash receipts and gross cash payments are disclosed; or*
- (b) *the indirect technique, whereby net profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of revenue or expense associated with investing or financing cash flows.*

The direct technique provides information which may be useful in estimating future cash flows and which is not available under the indirect technique and is, therefore, considered more appropriate than the indirect technique. Under the direct technique, information about major classes of gross cash receipts and gross cash payments may be obtained either :

- (a) from the accounting records of the enterprise; or
- (b) by adjusting sales, cost of sales (interest and similar revenue and interest expense and( similar charges for a financial enterprise) and other items in the statement of profit and loss for :
  - (i) changes during the period in inventories and operating receivables and payables;
  - (ii) other non-cash items; and
  - (iii) other items for which the cash effects are investing or financing cash flows.

Under the indirect technique, the net cash flow from operating activities is determined by adjusting net profit or loss for the effects of :

- (a) changes during the period in inventories and operating receivables and payables;
- (b) non-cash items such as depreciation, provisions, deferred taxes, and unrealized foreign exchange gains and losses; and
- (c) all other items for which the cash effects are investing or financing cash flows.

Alternatively, the net cash flow from operating activities may be presented under the indirect technique by showing the operating revenues and expenses excluding non-cash items disclosed in the statement of profit and loss and the

change during the period in inventories and operating receivables and payables.

#### Reporting Cash Flows from Investing and Financing Activities

*An enterprise should report separately major classes of gross cash receipts and gross cash payments arising from investing and financing activities, except to the extent that cash flows describe, are reported on a net basis.*

#### Reporting Cash Flows on a Net Basis :

*Cash flows arising from the following operating, investing or financing activities may be reported on a net basis :*

- (a) *cash receipts and payments on behalf "of customers when the cash flows reflect the activities of the customer rather than those of the enterprise; and*
- (b) *cash receipts and payments for items in which the turnover is quick, the sums are large, and the maturities are short.*

examples of cash receipts and payments referred to in paragraph 22(a) are :

- (a) the acceptance and repayment of demand deposits by a bank;
- (b) funds held for customers by an investment enterprise; and
- (c) rents collected on behalf of, and paid over to, the owners of properties.

Examples of cash receipts and payments referred to in paragraph 22(b) are advances made for, and the repayment of :

- (a) principal sums relating to credit and customers;
- (b) the purchase and sale of investments; and
- (c) other short-term borrowings, for example, those which have a maturity period of three months or less.

*Cash flows arising from each of the following activities of a financial enterprise may be reported on a net basis :*

- (a) *cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date;*
- (b) *the placement of deposits with and withdrawal of deposits from other financial enterprises; and*
- (c) *cash advances and loans made to customers and the repayment of those advances and loans.*

*Cash flows arising from transactions in a foreign currency should be recorded in an enterprise's reporting currency by applying to the foreign currency sum the exchange rate between the reporting currency and the foreign currency at the date of the cash flow. A rate that approximates the actual rate may be used if the result is substantially the same as would arise if the rates at the dates of the cash flows were used. The effect of changes in exchange rates on cash and cash equivalents held in a foreign currency should be reported as a separate part of the reconciliation of the changes in cash and cash equivalents during the period.*

Cash flows denominated in foreign currency are reported in a manner

consistent with Accounting Standard (AS) 11, Accounting for the Effects of Changes in Foreign Exchange Rates. This permits the use of an exchange rate that approximates the actual rate. For example, a weighted average exchange rate for a period may be used for recording foreign currency transactions.

Unrealized gains and losses arising from changes in foreign exchange rates are not cash flows. However, the effect of exchange rate changes on cash and cash equivalents held or due in a foreign currency is reported in the cash flow statement in order to reconcile cash and cash equivalents at the beginning and the end of the period. This sum is presented separately from cash flows from operating, investing and financing activities and includes the differences, if any, had those cash flows been reported at the end-of-period exchange rates.

#### **Extraordinary Items :**

*The cash flows associated with extraordinary items should be classified as arising from operating, investing or financing activities as appropriate and separately disclosed.*

The cash flows associated with extraordinary items are disclosed separately as arising from operating, investing or financing activities in the cash flow statement, to enable users to understand their nature and effect on the present and future cash flows of the enterprise. These disclosures are in addition to the separate disclosures of the nature and sum of extraordinary items required by Accounting Standard (AS) 5. Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies.

#### **Interest and Dividends :**

Cash flows from interest and dividends received and paid should each be disclosed separately. Cash flows arising from interest paid and interest and dividends received in the case of financial enterprise should be classified as cash flows arising from operating activities. In the case of other enterprises, cash flows arising from interest paid should be classified as cash flows from financing activities while interest and dividends received should be classified as cash flows from investing activities. Dividends paid should be classified as cash flows from financing activities.

The total sum of interest paid during the period is disclosed in the cash flow statement whether it has been recognized as an expense in the statement of profit and loss or capitalized in accordance with Accounting Standard (AS) 10. Accounting for Fixed Assets.

Interest paid and interest and dividends received are usually classified as operating cash flows for a financial enterprise. However, there is no consensus on the classification of these cash flows for other enterprises. Some argue that interest paid and interest and dividends received may be classified as operating cash flows because they enter into the determination of net profit or loss. However, it is more appropriate that interest paid and interest and dividends received are classified as financing cash flows and investing cash flows respectively, because they are cost of obtaining financial resources or returns on investments.

Some argue that dividends paid may be classified as a component of cash flows from operating activities in order to assist users to determine the ability of an enterprise to pay dividends out of operating cash flows. However, it is considered

more appropriate that dividends paid should be classified as cash flows from financing activities because they are cost of obtaining financial resources.

#### Taxes on Revenue :

Cash flows arising from taxes on revenue should be separately disclosed and should be classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities.

Taxes on revenue arise on transactions that give rise to cash flows that are classified as operating, investing or financing activities in a cash flow statement. While tax expenses may be readily identifiable with investing or financing activities, the related tax cash flows are often impracticable to identify and may arise in a different period from the cash flows of the underlying transactions. Therefore, taxes paid are usually classified as cash flows from operating activities. However, when it is practicable to identify the tax cash flow with an individual transaction that gives risk to cash flows that are classified as investing or financing activities, the tax cash flow is classified as an investing or financing activity as appropriate. When tax cash flow are allocated over more than one class of activity, the total sum of taxes paid is disclosed.

#### Investments in Subsidiaries, Associates and Joint Ventures :

*When accounting for an investment in an associate or a subsidiary or a joint venture, an investor restricts its reporting in the cash flow statement to the cash flows between itself and the investee/joint venture, for example, cash flows relating to dividends and advances.*

#### Acquisition and Disposals of Subsidiaries and other Business Units :

The aggregate cash flows arising from acquisition and from disposals of subsidiaries or other business units should be presented separately and classified as investing activities.

*An enterprise should disclose, in aggregate, in respect of both acquisition and disposal of subsidiaries or other business units during the period each of the following :*

- (a) *the total purchase or disposal consideration; and*
- (b) *the portion of the purchase or disposal consideration discharged by means of cash and cash equivalents.*

The separate presentation of the cash flow effects of acquisitions and disposals of subsidiaries and other business units as single line items helps to distinguish those cash flows from other cash flows. The cash flow effects of disposals are not deducted from those of acquisitions.

#### Non-cash Transactions :

*Investing and financing transactions that do not require the use of cash or cash equivalents should be excluded from a cash flow statement. Such transactions should be disclosed elsewhere in the financial statements in a way that provides all the relevant information about these investing and financing activities.*

Many investing and financing activities do not have a direct impact on current cash flows although they do affect the capital and asset structure of an enterprise. The exclusion of non-cash transactions from the cash flow statement is

consistent with the objective of a cash flow statement as these items do not involve cash flows in the current period.

Examples of non-cash transactions are :

- (a) the acquisition of assets by assuming directly related liabilities;
- (b) the acquisition of an enterprise by means of issue of shares; and
- (c) the conversion of debt to equity.

### **Components of Cash and Cash Equivalents :**

*An enterprise should disclose the components of cash and cash equivalents and should present a reconciliation of the sums in its cash flow statement with the equivalent items reported in the balance sheet.*

In view of the variety of cash management practices, an enterprise discloses the policy which it adopts in determining the composition of cash and cash equivalents.

The effect of any change in the policy for determining components of cash and cash equivalents is reported in accordance with Accounting Standard (AS) 5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies.

### **Other Disclosures :**

An enterprise should disclose, together with a commentary by management, the sum of significant cash and cash equivalent balances held by the enterprise that are not available for use by it.

There are various circumstances in which cash and cash equivalent balances held by an enterprise are not available for use by it. Examples include cash and cash equivalent balances held by a branch of the enterprise that operates in a country where exchange controls or other legal restrictions apply as a result of which the balances are not available for use by the enterprise.

Additional information may be relevant to users in understanding the financial position and liquidity of an enterprise. Disclosure of this information, together with a commentary by management, is encouraged and may include:

- (a) the sum of undrawn borrowing facilities that may be available for future operating activities and to settle capital commitments, indicating any restrictions on the use of these facilities; and
- (b) the aggregate sum of cash flows that represent increases in operating capacity separately from those cash flows that are required to maintain operating capacity.

The separate disclosure of cash flows that represent increases in operating capacity and cash flows that are required to maintain operating capacity is useful in enabling the user to determine whether the enterprise is investing adequately in the maintenance of its operating capacity. An enterprise that does not invest adequately in the maintenance of its operating capacity may be prejudicing future profitability for the sake of current liquidity and distributions to owners.

An illustration of preparation of a cash flow statement as per AS – 3 is given below.

The final accounts of a body corporate name Padmavati Ltd. are as follows :

**Balance Sheet as at 31-3-2000**

		31-3-2000		31-3-1999
Assets		Rs.		Rs.
Cash on hand and, advances with banks		2,00,000		35,000
Short-term investments		6,70,000		1,35,000
Sundry debtors		17,00,000		12,00,000
Interest receivable		1,00,000		-
Stock		9,00,000		19,50,000
Long-term investments		25,00,000		25,00,000
Fixed assets at cost	21,80,000		19,10,000	-
Less : Depreciation	14,50,000		10,60,000	
Fixed Assets (Net)		7,30,000		8,50,000
<b>Total Assets</b>		<b>68,00,000</b>		<b>66,70,000</b>
Liabilities :				
Sundry Creditors		1,50,000		18,90,000
Interest payable		2,30,000		1,10,000
Revenue-tax payable		4,00,000		10,00,000
Long-term debt		11,10,000		10,40,000
<b>Total Liabilities :</b>		<b>18,90,000</b>		<b>40,40,000</b>
Shareholders' Funds				
Share Capital		15,00,000		12,50,000
Reserves		34,10,000		13,80,000
<b>Total Shareholders' Funds :</b>		<b>68,00,000</b>		<b>66,70,000</b>

**Statement of Profit and Loss for the year ended 31-3-2000**

		Rs.
Sales		3,06,50,000
	Cost of Sales	2,60,00,000
	Gross Profit	46,50,000
<i>LESS</i>		
	Depreciation	4,50,000
	Administrative and selling expenses	9,10,000
	Interest Expenses	4,00,000
	Foreign exchange loss	40,000

		28,50,000
<i>Add</i>		
	Interest revenue	3,00,000
	Dividend revenue	2,00,000
	Net Profit before taxation and extraordinary item	33,50,000
	Extraordinary item - Insurance	1,80,000
	proceeds from earthquake	35,30,000
<i>Less</i>	: Revenue-tax Net Profit	3,00,000
		32,30,000

#### **Additional Information :**

- (1) An sum of. Rs. 2,50,000 was raised from the issue of share capital and a further Rs. 2,50,000 was raised from long-term borrowings.
- (2) Interest expenses was Rs. 4,00,000 of which Rs. 1,70,000 was paid during the period. Rs. 1,10,000 relating to interest expenses of the prior period was also paid during the year.
- (3) Dividend paid were Rs. 12,00,000.
- (4) Tax deducted at source on dividends received (involved in the tax expenses of Rs. 3,00,000 for the year) sumed to Rs. 40,000.
- (5) During the year, the venture acquired fixed assets for Rs. 3,50,000. The payment was made in cash.
- (6) Plant with original cost of Rs. 80,000 and accumulated depreciation of Rs. 60,000 was sold for Rs. 20,000.
- (7) Foreign exchange loss of Rs. 40,000 represents the reduction in the carrying sum of a short-term investment in foreign currency bonds arising out. of a change in exchange rate between the date of acquisition of the investment and the balance sheet date.
- (8) Sundry debtors and sundry creditors include sums relating to credit sales and credit purchases only.

#### **Solution :**

#### **CASH FLOW STATEMENT**

<b>(I) Cash flows from Operating Activities :</b>	<b>Rs.</b>
Net Profit before taxation	3,50,000
Adjustments :	
<i>Add</i> : (1) Depreciation	4,50,000

(2) Foreign exchange loss	40,000
(3) Interest expense	4,00,000
	8,90,000
	42,40,000
<i>Less : (4) Interest revenue</i>	3,00,000
(5) Dividend revenue	2,00,000
	5,00,000
Operating profit before working capital changes	7,40,000
(1) Increase in debtors	- 5,00,000
(2) Decrease in stock	+ 10,50,000
(3) Decrease in creditors	- 17,40,000
Cash generated from operations	25,50,000
<i>Less : Revenue taxes paid</i>	8,60,000
	16,90,000
<i>Add : Extraordinary revenue</i>	1,80,000
Net cash from operating activities :	18,70,000

#### **(II) Cash Flows from Investing Activities :**

(1) Purchase of fixed assets	- 3,50,000
(2) Proceeds from sale of equipments	+ 20,000
(3) Interest received	+ 2,00,000
(4) Dividends received	+ 1,60,000
Net cash from investing activities	30,000

#### **(III) Cash Flows from Financing Activities :**

(1) Proceeds from issue of share capital	2,50,000
(2) Proceeds from long-term borrowings	2,50,000
(3) Repayment of long-term borrowings	-1,80,000
(4) Interest paid	-2,80,000
(5) Dividends paid	-12,00,000
Net cash used in financing activities	- 11,50,000
Net increase in cash and cash equivalents	7,50,000
(18,70,000 + 30,000 - 11,50,000)	
Cash and cash equivalents at beginning of year	1,60,000
Cash and Cash equivalents at the end of year	9,10,000

**(1) Cash and Cash Equivalents :**

(1) Cash and Cash equivalents consist of cash on hand and balances with banks and investments in money market investments.

	2000	1999
	Rs.	Rs.
Cash on hand and balances		
with banks .	2,00,000	35,000
Short-term investments	6,70,000	
	1,35,000	
Cash and Cash equivalents	8,70,000	
	1,60,000	
Effect of exchange rate changes	40,000	
	9,10,000	
	1,60,000	

(ii) Cash and Cash equivalents at the end of the period include deposits with banks of Rs. 1,00,000 held by a branch which are not freely remissible to the corporation because of exchange restrictions.

(iii) The body corporate has undrawn borrowing facilities of Rs. 20,00,000 of which Rs. 7,00,000 may be used only for future expansion.

(2) Total tax paid during the year (including tax deducted at source on dividends received) summed to Rs. 9,00,000.

**Working notes :**

(1) Cash received from customers :

Sales .	3,06,50,000
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*Add* : Sundry debtors at the beginning of the year

12,00,,000
------------

*Less* : Sundry debtors at the end of the year

3,18,50,000	17,00,000
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(2) Cash paid to suppliers and employees :

Cost of sales .	3,01,50,000
-----------------	-------------

Administrative and Selling Expenses	2,60,00,000	9,10,000
-------------------------------------	-------------	----------

2,69,10,000
-------------

*Add* : Sundry Creditors at the

beginning of the year .

18,90,000
-----------

Stock at the end of the year

9,00,000
----------

27,90,000
-----------

	2,97,00,000
<i>Less</i> : Sundry creditors at the end of the year	1,50,000
Stock at the beginning of the year	19,50,000
	21,00,000
	2,76,00,000

Notes : (1) Calculation for revenue-tax paid :	Rs.
Revenue tax expense for the year	
(including tax deducted at source from dividends received)	3,00,000
<i>Add</i> : Revenue tax liability at the beginning of the year	10,00,000
	13,00,000
<i>Less</i> : Revenue-tax liability at the end of the year	4,00,000
	9,00,000
<i>Less</i> : Tax deducted from dividend	40,000
Cash flows from operating activities	8,60,000
(2) Repayment of long-term borrowings :	
Long-term debt at the beginning of the year	10,40,000
<i>Add</i> : Long-term borrowings made during the year	2,50,000
	12,90,000
<i>Less</i> : Long term borrowings made during the year	11,10,000
Repayment of borrowings during the year	1,80,000
(3) Interest Paid :	
Interest expense for the year	4,00,000
<i>Add</i> : Interest payable at the beginning of the year	1,10,000
	5,00,000
<i>Less</i> : Interest payable at the end of the year	2,30,000
Interest paid	2,80,000

#### 4.10 Exercise

1. Describe the concept of cash flow statements and state how it differs from fund flow statement?
2. State the utilities of cash flow statements?
3. State the limitations of cash flow statements?

#### 4.11 Practical:

1. From the following details of Sahil Ltd. calculate the cash inflow

from operations for the year 1999-2000

Profit during the year 1999-2000 Rs. 90,000

	31-3-'99	31-3-2000
	Rs.	Rs.
Debtors	39,000	36,000
Creditors	17,000	22,000
Bills Receivable	8,000	10,500
Bills Payable	6,000	5,000
Outstanding Expenses	1,200	1,600
Accrued Revenue	1,500	1,700
Stock	25,000	30,000

Solution :

Cash Flow Statement for the year 1999-2000

		Rs.
Profit during the year		90,000
Add (1) Decrease in Debtors	3,000	
(2) Increase in Creditors	5,000	
(3) Increase in Outstanding Expenses	400	8,400
		98,400
Less : (1) Increase in Stock	5,000	
(2) Increase in Bills Receivable	2,500	
(3) Increase in Accrued revenue	200	
(4) Decrease in Bills Payable	1,000	8,700
Cash from Operations :		89,700

2. From the following Balance-Sheets of Sunit Ltd., make out cash flow statement.

**Balance Sheets**

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Equity Share Capital	3,10,000	4,00,000	Goodwill	1,25,000	90,000
8% Redeemable			Land & building	2,00,000	1,70,000
Preference Share Capital			Machineries	80,000	2,00,000
	1 50000	1 00,000	Debtors	1.60,000	2,00,000

General Reserve	40000	70,000	Stock	77,000	1,09,000
Profit and Loss A/c	30000	48000	Bills Receivable	20,000	30,000
Proposed Dividend	42,000	50,000	Cash on Hand	12,000	10,000
Creditors	55,000	83,000	Bank Balance	13,000	8,000
Bills Payable	20,000	16,000			
Provision for Taxation	40,000	50,000			
	6,77,000	8,17,000		6,77,000	8,17,000

Additional Information :

- (1) During the year 1999-2000 depreciation charged was Rs. 10,000 on machineries and Rs. 20,000 on land & building.
- (2) Interim dividend paid during 1999-2000 summed to Rs. 20,000.
- (3) Taxation paid during the year 1999-2000 was Rs. 35,000.

Solution

Let us find out necessary figures for preparing Cash Flow-Statement.

**Provision for Taxation Account**

	Rs.		Rs.
To Bank (Tax paid)	35,000	By Balance b/d	
“ Balance c/d		(opening bal.)	40,000
(closing balance)	50,000	“ P and L A/c (?)	45,000
	85,000	- Provision	85,000

**Land and Building Account**

	Rs.		Rs.
To Balance b/d (opening)	2,00,000	By Depreciation -A/c	20,000
		“ Bank-Sale (?)*	10,000
		“ Balance c/d	
		(closing balance)	1,70,000
	2,00,000		2,00,000

\* Note : On credit side of Land & Building A/c there is a missing item of Rs. 10,000 after charging Depreciation of Rs. 20,000; for that we assume that it must be the sale of land & building at book-value.

**Machinery Account**

	Rs.		Rs.
To Balance b/d (opening)	80,000	By Depreciation A/c	10,000
“ Bank-Purchase (?)	1,30,000	“ Balance c/d	
		(closing balance)	2,00,000
	2,10,000		2,10,000

**Adjusted Profit and Loss Account**

	Rs.		Rs.
To Depreciation on Machinery	10,000	By Balance b/d	
“ Depreciation on Building	20,000	(opening balance)	30,000
“ Goodwill written off	35,000	“ Cash, inflow from profit (?)	2,28,000
“ Provision for Taxation	45.000		
“ Interim Dividend	20,000		
“ Proposed Dividend	50,000		
“ General Reserve	30.000		
“ Balance c/d	48.000		
	2,58,000		2,58,000

**Statement of Cash from Operations**

	Rs.
Cash Inflow from Profits	2,28,000
Add : Increase in Creditors	28,000
	2,56,000
Less : Decrease in Bills Payable	4,000
Increase in Debtors	40,000
Increase in Stock	32,000
Increase in Bills Receivable	10,000
Cash From Operations....	86,000
	1,70,000

**Cash Flow Statement**  
**for the year ended 31st March, 2000**

		Rs.
Opening balance (1-4-'99)		
Cash on hand	12,000	
Bank balance	13,000	25,000
<i>Add : Cash Inflows :</i>		
(1) Cash from Operations	1,70,000	
(2) Increase in Share capital	90,000	
(3) Sale of Land-building	10,000	2,70,000
		2,95,000
<i>Less : Cash Outflows :</i>		
(1) Repayment, of .Red. Pref. Share Capital	50,000	
(2) Purchase, of Machinery	1,30,000	
(3) Payment of Dividend (last year's)	42,000	
(4) Interim Dividend	20,000	
(5) Payment of Taxation	35,000	2,77,000
Closing cash balance (31-3-2000)		
Cash on hand	10,000	
Bank balance , . .	8,000	18,000

3. Following are the summarized Balance Sheets of Kalpit Ltd. as on 31st March, 1999 and 31st March, 2000.

**Balance Sheets**

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Share Capital	2,00,000	2,50,000	Land and Building	2,00,000	1,90,000
General Reserve	50,000	60,000	Machinery	1,50,000	1,69,000
Profit & Loss A/c	30,500	30,600	Stock	1,00,000	74,000
Bank Loan	80,000	-	Debtors	90,000	64,200
Creditors	1,50,000	1,35,200	Cash	500	600
Provision for Taxation	30,000	35,000	Bank Balance	-	8,000
	5,30,500	5,10,800	Goodwill	-	5,000
	5,30,500	5,10,800		5,30,500	5,10,800

**Additional Information :**

During the year ended 31st March, 2000

- (1) Dividend of Rs. 24,000 was paid.
- (2) The following assets of another body corporate were purchased for a consideration of Rs. 50,000 paid for in shares.  
Stock Rs. 20,000; Machinery Rs. 25,000
- (3) Machinery was purchased for Rs. 8,000.
- (4) Depreciation written off :  
Machinery' Rs. 12,000; Land and Building Rs. 10,000.
- (5) Provision was made for revenue-tax Rs. 33,000 during the year.
- (6) The loss on sale of machinery Rs. 200 was transferred to General Reserve.

**Solution :**

- (1) We shall first arrange Machinery A/c; Provision for Taxation A/c; General Reserve A/c and Adjusted P & L A/c.
- (2) Then we shall give effect to changes in current assets and current liabilities to ascertain the cash inflow from operations.
- (3) Finally, we shall prepare Cash Flow Statement.

**Machinery Account**

	Rs.		Rs.
To Balance b/d		By Depreciation	12,000
(opening balance)	1,50,000	" General Reserve (loss trf.)	200
" Share Capital A/c	25,000	" Bank (?) - sale	1,800
" Bank-Purchase	8,000	" Balance c/d	
		(closing balance)	1,69,000
	1,83,000		1,83,000

Notes : (1) The loss on sale of machinery Rs. 200 is given in the example, but the sale price has not been mentioned. It is found out as a balancing item on the credit side of Machinery A/c.

(2) The machinery acquired against shares are of the value of Rs. 25,000 for which Machinery A/c is debited and Share Capital A/c is credited. Hence, on the debit side, the particulars are 'Share Capital A/c. The particulars for machinery purchased for cash is "Bank A/c."

**Provision for Taxation Account**

	Rs.		Rs.
To Bank A/c-paid (?)	28,000	By Balance b/d (opening bal.)	30,000
“ Balance c/d (closing balance)	35,000	“ Profit and Loss A/c - Provision	33,000
	63,000		63,000

**General Reserve Account**

	Rs.		Rs.
To Machinery A/c	200	By Balance b/d (opening bal.)	50,000
“ Balance c/d (closing balance)	60,000	“ P & L A/c (?)	10,200
	60,200		60,200

**Adjusted Profit and Loss Account**

	Rs.		Rs.
To Depreciation on Land and Building	10,000	By Balance b/d (opening balance)	30,500
“ Depreciation on Machinery	12,000	“ Cash inflow from Profit (?)	89,300
“ Provision for Taxation	33,000		
“ General Reserve	10,200		
“ Dividend	24,000		
“ Balance c/d (closing balance)	30,600		
	1,19,800		1,19,800

**Statement of Cash from Operations**

		Rs.
Cash - Inflow from profit		89,300
Add (1) Decrease in Stock	46,000	
(2) Decrease in Debtors	25,800	71,800
		1,61,100
Less :Decrease in Creditors		14,800
Cash Flow from Operations :		1,46,300

**Cash Flow Statement for the year ending 31-3-2000**

		Rs.	Rs.
	Opening Cash Balance (1-4-99)		500
<i>Add :</i>	Cash Inflows :		
	(1) Cash from Operations	1,46,300	
	(2) Sale of- Machinery	1,800	1,38,100
<i>Less .</i>	Cash Outflows :		1,48,600
	(1) Payment of Dividend	24,000	
	(2) Purchase of Machinery	8,000	
	(3) Payment of Taxation	28,000	
	(4) Repayment of Bank loan	80,000	1,40,000
	Closing Cash and Bank Balance :		8,600

Notes : In the cash flow statement, the cash balance includes bank balance also.

The closing stock is valued at Rs. 74,000, which includes stock purchased against shares Rs. 20,000. This does not affect cash and hence the balance of Rs. 54,000 will affect cash. Here the dissimilarity of Rs. 46,000 (1,00,000 - 54,000) is shown.

The assets acquired are stock Rs. 20,000 and machinery Rs. 25,000 against which shares of Rs. 50,000 are issued. The difference of Rs. 5,000 has therefore been treated as goodwill. This will not affect cash.

4. Prepare statements showing following details from the Balance Sheets and other details given below of the Aishawarya Ltd.

(1) Cash from Operations

(2) Cash Flow Statement

**Balance Sheets**

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Share Capital	4,50,000	4,50,000	Plant & Machinery	4,00,000	3,20,000
General Reserve	3,00,000	3,00,000	Investment	50,000	60,000
Profit & Loss A/c	30,000	35,000	Stock	2,00,000	1,95,000
Capital Reserve	26,000	33,000	Bills Receivable	40,000	15,000
Debentures	-	2,80,000	Debtors	2,00,000	4,55,000
Creditors	90,000	75,000	Bank Balance	1,59,000	2,07,000
Bills Payable	78,000	59,000			
Provision for Taxation	75,000	10,000			

	10,49,000	12,42,000		10,49,000	5,10,800
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Other details are as follows :

(1) During the year, investments worth Rs. 8,000 were sold at a price of Rs. 8,500 and new investments worth Rs. 18,000 were purchased.

(2) Net profit of the year was Rs. 62,000 after debiting the depreciation of Rs. 70,000 on Plant and Machinery and Rs. 10,000 Provision for Taxation.

(3) During the year Plant and Machinery worth Rs. 10,000 were sold at price of Rs. 12,000 and the profit on the same was credited to Profit and Loss Account.

(4) During the year Rs. 60,000 were paid as Dividend.

Solution :

Let us now find out necessary figures for preparing Cash Flow Statement. (1) There is a profit of Rs. 500 on sale of investments which can be seen from following account :

**Investments Account**

	Rs.		Rs.
To Balance A/c	50,000	By Cash-Sales	8,500
“ Profit on Sale(?)	500	“ Balance A/c (?)	60,000
“ Cash Purchase	18,000		
	68,500		68,500

(2) Profit of Rs. 2,000 on sale of fixed assets can be verified from the following account :

**Fixed Assets Account**

	Rs.		Rs.
To Balance A/c	4,00,000	By Depreciation	70,000
“ Profit on Sale(?)	2,000	“ Cash – sale	12,000
		“ Balance c/d	3,20,000
	4,02,000		4,02,000

**Provision for Taxation Account**

	Rs.		Rs.
To Cash-taxes paid (?)	75,000	By Balance b/d	75,000
Closing Balance	10,000	(Provision year)	
		“ profit and Loss A/c	
		(Current year)	10,000
	85,000		85,000

(3) The inflow of cash from trading can be ascertained by preparing Adjusted Profit and Loss Account as under :

### Adjusted Profit & Loss Account

	Rs.		Rs.
To Depreciation	70,000	By Balance b/d	30,000
Dividend	60,000	“ Profit on sale of	
Provision for taxation*	10,000	Fixed assets	2,000
General Reserve	7,000	“ Profit on investments	500
“ Balance c/d	35,000	“ Prof. (source of cash inflow)	1,59,500
	1,92,000		1,92,000

### Statement of Cash from Operations

		Rs.	Rs.
	Cash from Profit		1,59,500
<i>Add :</i>	(1) Decrease in Stock	5.000	
	(2) Decrease in Bills Receivable	25,000	30,000
			1.89,500
<i>Less .</i>	(1) Increases in Debtors	2.55.000	
	(2) Decrease in Creditors	15.000	
	(3) Decrease in Bills payable	19.000	2.89.000
	Cash from Operations :		-99.500

### Cash Flow Statement

		Rs.	Rs.
	Opening Bank Balance		1,59,000
<i>Add :</i>	Cash Inflows :		
	(1) Sale of Investments	8,500	
	(2) Sale of Fixed Assets	12,000	
	(3) Issue of Debentures	2,80,000	3,10,500
			4,59,500
<i>Less :</i>	Cash Outflows :		
	(1) Cash from Operations	99.500	
	(2) Purchase of Investments	18.000	
	(3) Payment of Dividend	60.000	
	(4) Payment of Taxes	175.000	2.52.500
	Closing Bank Balance :		2,07,000

5 : Prepare a Cash Flow Statement after taking into account the balance sheets and additional information given for Sujal Ltd. below. All the calculations done by you are to be shown as part of your answer :

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets-	31-3-99 Rs.	31-3-2000 Rs.
Equity Share					
Capital	2,00,000	2,51,000	Goodwill	30,000	27,000
Share Premium	10,000	15,000	Land and Buildings	90,000	1,40,000
General Reserve	35,000	40,000	Machinery	1,30,000	1,50,000
Profit and Loss A/c	25,000	90,000	Patents	50,000	45,000
6% Debentures	1,00,000	1,00,000	Furniture and		
Creditors	30,000	40,000	Fixtures	15,000	13,500
Provision for			Sundry Debtors	45,000	70,000
Taxation	18,000	15,000	Cash & Bank		
			Balance	5,800	8,000
			Stock	50,000	96,000
			Debenture Discount	1,200	1,000
			Preliminary Expenses	1,000	500
	4,18,000	5,50,000		4,18,000	5,50,000

#### Additional Information :

(1) Depreciation written off : Land & Buildings Rs. 9,000; Machinery Rs. 13,000; Patents Rs. 5,000; Furniture & Fixtures Rs. 1,500; (2) During the year Machinery of Rs. 20,000 was sold at Rs. 15,000 (3) During the year taxes and dividend paid were Rs. 8,000 and 20,000 respectively.

#### Solution :

The following points should be studied before preparing the Cash Flow Statement.

- (1) Value of Goodwill was Rs. 30,000 in 1998-'99 and the same is Rs. 27,000 in 1999-2000 indicating that Rs. 3,000 has been written off goodwill during the current year.
- (2) It can, similarly, be inferred that Rs. 200 has been written off Debenture discount and Rs. 500 off Preliminary expenses.
- (3) A machine costing Rs. 20,000 was sold at Rs. 15,000 during the year 1999-2000 showing a loss of Rs. 5,000 on sale of machine.

(4) Rs. 20,000 has been paid for dividend during the current year signifying the application of funds. The dividend must be in respect of the year 1999-2000 as no proposed dividend appears in the balance sheet of 1998-99.

(5) Additional funds of Rs. 50,000 have been raised during the current year by issuing shares.

(6) There is an addition of Rs. 5,000 to the Share Premium Account which shows the premium received on shares issued during the current year.

(7) It seems that a sum of Rs. 5,000 has been transferred from profit to General Reserve, which must be taken into account while preparing Adjusted Profit and Loss Account.

(8) The Provision for Taxation for the previous year 1998-99 was Rs. 18,000 against which Rs. 8,000 has been paid as taxes, showing a surplus of Rs. 10,000. The provision at the end of the current year stands at Rs. 15,000; showing a transfer of Rs. 5,000 ( $15,000 - 10,000$ ) from the Profit and Loss Account. This can be verified by preparing the account as under :

**Provision for Taxation Account**

	Rs.		Rs.
To Taxes paid	8,000	By Balance b/d	
“ Closing Balance	15,000	(Previous year's)	18,000
		“ Profit and Loss A/c (?)	5,000
	23,000		23,000

(9) There is some addition to Land and Buildings which can be ascertained by preparing the account as under :

**Land and Buildings Account**

	Rs.		Rs.
To Opening Balance	90,000	By Depreciation	9,000
“ Purchases (?)	59,000	“ Closing Balance	1,40,000
	1,49,000		1,49,000

(10) Additions to the Machinery can, likewise, be found out by preparing the account.

**Machinery Account**

	Rs.		Rs.
To Opening Balance	1,30,000	By Sale of Machinery	15,000
“ Purchase during the year (?)	53,000	“ Loss on sale	5,000
		“ Depreciation	13,000
		“ Closing Balance	1,50,000
	1,83,000		1,83,000

(11) In order to ascertain the inflow of funds from trading operations i.e. from profit, an Adjusted Profit and Loss Account will be prepared as under :

**Adjusted Profit and Loss Account**

To Depreciation :			By Balance b/d	25,000
	9,000		Adjusted Profit	1,32,200
Land				(Showing inflow of Cash)
Machinery	13,000			
Patents	5,000			
Furniture	1,500	28,500		
“ Sums written off				
Goodwill	3,000			
Deb. Discount	200			
Prel. Expenses	500	3,700		
“ Provision for Taxation		5,000		
“ Loss on sale of Machinery		5,000		
“ Dividend		20,000		
“ General Reserve		5,000		
“ Bal. c/d (Closing Balance)		90,000		
		1,57,200		1,57,200

**Cash from Operations**

		Rs.	Rs.
	Cash from Profit		1,32,200
Add	Increase in Creditors	10,000	10,000
			1,42,200
Less	(1) Increase in Debtors	25,000	
	(2) Increase in Stock	46,000	71,000
	Cash from Operations :		71,200

### Cash Flow Statement

		Rs.	Rs.
	Opening Cash Balance		5,800
<i>Add</i>	Cash Inflows :		
	(1) Cash from Operations	71,200	
	(2) Sale of Machinery	15,000	
	(3) Share Capital	51,000	
	(4) Share Premium	5,000	1,41,200
			1,48,000
<i>Less</i>	: Cash Outflows :		
	(1) Payment of Tax	8,000	
	(2) Purchase of Land	59,000	
	(3) Payment of Dividend	20,000	
	(4) Purchase of Machinery	53,000	1,40,000
	Closing Cash Balance :		8,000

6. The balance sheets of Khushvi Ltd. as on 31-3-1999 and 31-3-2000 are given below. Prepare Cash Flow Statement :

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Share Capital	3,00,000	4,10,000	Fixed Assets at cost	8,00,000	9,50,000
Capital Reserve	-	10,000	Less :		
General Reserve	1,70,000	2,00,000	Depreciation	2,30,000	2,90,000
P & L Account	60,000	75,000		5,70,000	6,60,000
Debentures	2,00,000	1,40,000	Investments	1,00,000	80,000
Current Liabilities	1,20,000	1,30,000	Current Assets	2,70,000	3,10,000
Provision for Revenue			Cash Balance	10,000	30,000
Tax	90,000	85,000	Preliminary expenses	20,000	10,000
Proposed Dividend	30,000	36,000			
Unpaid Dividend	-	4,000	.		
	9,70,000	10,80,000		9,70,000	10,80,000

During the year 1999-2000 the body corporate :

- (1) Sold one machine for Rs. 24,000 the cost of which was Rs. 50,000 and the depreciation provided on it was Rs. 21,000.
- (2) Provided Rs. 95,000 as depreciation.
- (3) Redeemed 10% of Debentures at Rs. 103.
- (4) Sold some Trade Investments at a profit which was credited to Capital Reserve.
- (5) Decided to value stock at cost whereas previously the practice was to value stock at cost less 10%. The stock according to books on 31-3-1999 was Rs. 54,000. The stock on 31-3-2000 was correctly valued at cost Rs. 75,000.
- (6) Write off fixed assets costing Rs. 14,000 which is fully depreciated.

**Solution :**

Before preparation of Cash Flow Statement, Set us understand one important point. Value of stock of last year is Rs. 54,000 which is 10% less than its correct value, i.e. it was 90%. Thus if book value of stock is Rs. 90 then its correct value is Rs. 100, then what will be correct price of stock having book value of Rs. 54,000 ? =  $Rs. 54,000 \times 100/90 = Rs. 60,000$ .

Now if we want to show stock at its correct value, then value of stock should be increased by Rs. 6,000. This will have effect at two places viz : (1) In Statement of Cash from Operations, stock will be shown at its new corrected value and (2) In Adjusted Profit & Loss A/c. Rs. 6,000 will be written on credit side.

**Provision for Depreciation Account**

	Rs.		Rs.
To Fixed Assets A/c (Sold)	21,000	By Opening Balance	2,30,000
“ Fixed Assets A/c		“ Profit and Loss A/c	
(Depreciation written off)	14,000	- written off	95,000
Closing Balance	2,90,000		
	3,25,000		3,25,000

### Fixed Assets Account

	Rs.		Rs.
To Balance b/d	8,00,000	By Bank A/c	24,000
“ Bank A/c-Purchase	2,14,000	“ Prov. for Depreciation-on	
		Assets sold	21,000
		“ Prov. for Depreciation-	
		on Fixed Asset	14,000
		“ Profit and loss A/c	
		-Loss on sale	5,000
		Balance c/d	9,50,000
	10,14,000		10,14,000

### Adjusted Profit and Loss Account

	Rs.		Rs.
To Loss on sale, of Fixed Asset	5,000	By Opening Balance	60,000
Depreciation ,	95,000	“ Increase in value of stock	6,000
“ Debenture Redemption		“ Adjusted Profit	
Premium (3% on		-Cash from Profit	1,86,800
Rs. 60,000)	1,800		
Preliminary Expenses			
-written off	10,000		
“ Proposed Dividend	36,000		
“ General Reserve	30,000		
“ Closing Balance	75,000		
	2,52,800		2,52,800

Notes : (1) Profit on sale of investments should be Rs. 10,000 as Rs. 10,000 is credited to Capital Reserve in the current year. Moreover the investments are reduced by Rs. 20,000, which means that these investments are sold for Rs. 30,000.

(2) As debentures of Rs. 60,000 are redeemed at a premium of 3%, total sum paid to debenture holders will be Rs. 61,800 ( $60,000 \times 103/100$ ).

(3) Assuming that last year's proposed dividend is paid in current year, it is shown as cash outflow. But out of last year's dividend of Rs. 30,000, dividend of Rs. 4,000 is not paid and as such dividend of Rs. 26,000 has been paid.

**Cash from Operations**

		Rs.	Rs.
	Cash Flow from Profit		1,86,800
<i>Add :</i>	Increase in current liabilities		10,000
			1,96,800
<i>Less :</i>	Increase in current assets		
	(Including Rs. 6,000 in opening stock)	34,000	
	Decrease in provision for taxation	5,000	39,000
	Cash from Operations :		1,57,800

**Cash Flow Statement**

		Rs.	Rs.
	Opening Cash Balance		10,000
<i>Add</i>	<i>: Cash Inflows :</i>		
	(1) Cash from Operations	1,57,800	
	(2) Sale of Investments	30,000	
	(3) Sale of Fixed Assets	24,000	
	(4) Increase in Share Capital	1,10,000	<u>3,21,800</u>
			3,31,800
<i>Less</i>	<i>Cash Outflows</i>		
	(1) Purchase of Fixed Assets	2,14,000	
	(2) Payment of Debentures	61,800	
	(3) Payment of Dividend	26,000	
			3,01,800
	Closing Cash Balance		30,000

7. The Balance Sheet of Kajol Ltd. as on 31-3-'95 and 31-3-'96 are as follows :

Liabilities	31-3-'95	31-3-'96	Assets	31-3-'95	31-3-'96
	Rs.	Rs.		Rs.	Rs.
10% Redeemable Pref. Share Capital each of Rs. 10. Rs. 7 per share paid up			Goodwill	80,000	60,000
			Land &		
			Building	1,60,000	2,50,000
			Plant &		
			Machinery	1,40,000	2,00,000
	70,000	-	Investments	40,000	-
Equity Share Capital each of Rs. 10 fully- paid up			Stock	30,000	50,000
			Debtors	44,000	40,000
			Bills Receivable	10,000	10,000
	2,00,000	3,00,000	Cash	10,000	21,000
Share Premium	15,000	10,000	Bank Balance	-	40,000
General Reserve	80,000	50,000			
Profit & Loss A/c	35,000	85,000			
12% Debentures		1,00,000			
Bank Overdraft	20,000				
Creditors	50,000	60,000			
Provision for					
Taxation	24,000	30,000			
Proposed					
Dividend	20,000	36,000			
	5,14,000	6,61,000		5,14,000	6,61,000

Additional Information :

During the year ending 31st March/ 1996 :

- (1) Investments are sold at profit of 20% on its sales proceeds.
- (2) Depreciation written off : on Land and Building Rs. 30,000; on Plant and Machinery Rs.25,000.
- (3) The body corporate has redeemed redeemable pref. shares with 5% premium after observing necessary requirements of Act. For the purpose of redemption of pref. shares, the sum of Rs. 1,00,000 has been transferred from General Reserve.
- (4) The body corporate issued Bonus Shares to the existing equity shareholders from Capital Redemption Reserve, in the proportion of

2 : 1.

- (5) Debentures were issued at 5% discount.
- (6) Rs. 25,000 have been paid as tax for the last year and the sum of 15,000 paid from last year proposed dividend.

From the above information, prepare Cash Flow Statement. Note : All "calculations are to be considered as a part of the answer.

**Solution:**

- (1) Firstly, we shall prepare Land and Building Account, Plant and Machinery Account, Investments Account, Proposed Dividend Account, Provision for Taxation Account, General Reserve Account and Adjusted Profit and Loss Account.
- (2) Then on the basis of Adjusted Profit and Loss A/c, we shall find out cash from operations giving effect to changes in current assets and current liabilities.
- (3) Finally, we shall prepare Cash Flow Statement.

**Goodwill Account**

	Rs.		Rs.
To Balance b/d	80,000	By Profit and Loss A/c	20,000
		" Balance c/d	60,000
	80,000		80,000

**Land and Building Account**

	Rs.		Rs.
To Balance b/d	1,60,000	By Depreciation	30,000
" Bank A/c-Purchase	1,20,000	" Balance c/d	2,50,000
	2,80,000		2,80,000

**Plant and Machinery Account**

	Rs.		Rs.
To Balance b/d	1,40,000	By Depreciation	25,000
" Bank A/c - Purchase	85,000	" Balance c/d	2,00,000
	2,25,000		2,25,000

**Investments Account**

	Rs.		Rs.
To Balance b/d	40,000	By Bank A/c-Sale	50,000
" Profit and Loss A/c- Profit	10,000	" Balance c/d	-
	50,000		50,000

**Note :** Find out the sale price of investments as" follows : Investments are sold at

profit of 20% on its sale proceeds.

Suppose sale price is 100

<i>Less</i> : Profit	20
Cost Price	80

Rs. Cost	Rs. Sale Price
80	100
40,000	(?)

= Rs. 50,000 sale price of investment

#### Proposed Dividend Account

	Rs.		Rs.
To Bank A/c-paid	15,000	By Balance b/d	20,000
“ Balance c/d	36,000	“ Profit and Loss A/c	31,000
	51,000		51,000

#### Provision for Taxation Account

	Rs.		Rs.
To Bank A/c-paid	25,000	By Balance b/d	24,000
“ Balance c/d	30,000	“ Profit and Loss A/c	31,000
	55,000		55,000

#### 12% Debentures Account

	Rs.		Rs.
To Balance c/d	1,00,000	By Balance b/d	
		“ Bank A/c	95,000
		“ Debenture Discount A/c	5,000
	1,00,000		1,00,000

#### Debenture Discount Account

	Rs.		Rs.
To 12% Debentures A/c	5,000	By Profit and Loss A/c	5,000
	5,000		5,000

**General Reserve Account**

	Rs.		Rs.
To Capital Redemption		By Balance b/d	80,000
Reserve A/c	1,00,000	“ Profit and LOSS A/c	70,000
“ Balance c/d	50,000		
	1,50,000		1,50,000

**Share Premium Account**

	Rs.		Rs.
To Redemption Premium A/c	5,000	By Balance b/d	15,000
“ Balance c/d	10,000		
	15,000		15,000

**Equity Share Capital Account**

	Rs.		Rs.
To Balance c/d	3,00,000	By Balance b/d	2,00,000
		“ Capital Redemption	
		Resere A/c. - Bonus	
		Shares	1,00,000
	3,00,000		3,00,000

**Red. Pref. Share Capital Account**

	Rs.		Rs
To Pref. Shareholders A/c	1,00,000	By Balance b/d “ Bank A/c -	70,000
		Final installment	30,000
	1,00,000		1,00,000

**Capital Redemption Reserve Account**

	Rs.		Rs.
To Equity Share		By General	
Capital A/c-Bonus Shares	1,00,000	Reserve A/c	1,00,000

**Redemption Premium Account**

	Rs.		Rs.
To Pref. Shareholders A/c	5,000	By Share Premium A/c	5,000

**Pref. Shareholders Account**

	Rs.		Rs.
To Bank A/c-Payment	1,05,000	By Red. Pref. Share	
		Capital A/c	1,00,000
		“ Redemption	
		Premium A/c	5,000
	1,05,000		1,05,000

Provisions of Companies Act for Redemption of Pref. Shares :

- (1) The issue of such shares should be authorized by the Articles of the body corporate.
- (2) The shares can be redeemed only if they are fully paid up.
- (3) The shares may be redeemed out of profits of the body corporate which would otherwise be obtainable for dividend or out of the proceeds of a fresh issue of shares made for the purpose of redemption.
- (4) Where the shares are redeemed out of profits, a sum equal to nominal sum of shares redeemed is to be transferred out of profits to the Capital Redemption Reserve Account.
- (5) The Premium, if any, payable on redemption will have to be provided out of profits or out of the share premium account.
- (6) The Capital Redemption Reserve Account may be utilized by the body corporate in issuing fully paid Bonus Shares.

**Adjusted Profit and Loss Account**

	Rs.		Rs.
To Goodwill written off	20,000	By Balance b/d Profit on sale	35,000
“ Debenture discount written off	5,000	of investments	10,000
“ Depreciation A/c : Land & Bldg. 30,000		“ Adjusted Profit (Showing inflow of Cash)	2,52,000
Plant & Mach. 25,000	55,000		
“ General Reserve A/c	70,000		
“ Proposed Dividend A/c	31,000		
“ Provision for Taxation	31,000		
“ Balance c/d	85,000		
	2,87,000		2,87,000

**Statement of Cash from Operations**

		Rs.	Rs.
	<b>Cash Flow from Profit :</b>		2,52,000
<i>Add :</i>	(1) Decrease in Debtors	4,000	
	(2) Increase in Creditors	10,000	14,000
			2,66,000
<i>Less .</i>	<b>Increase in Stock</b>		20,000
	<b>Cash from Operations</b>		2.46,000

**Cash Flow Statement :**

		Rs.	Rs.
	<b>Opening Cash Balance</b>	10,000	
	<b>Opening Bank Overdraft</b>	-20,000	-10,000
<i>Add :</i>	<b>Cash Inflows :</b>		
	(1) Cash from Operations	2,46,000	
	(2) Sale of Investments	50,000	
	(3) Final installment of Red. Pref. Shares	30,000	
	(4) Issue of Debentures (less discount)	95,000	4,21,000 4,11,000
<i>Less</i>	<b>Cash Outflows :</b>		
	(1) Purchase of Land and Building.	1,20,000	
	(2) Purchase of Plant and Machinery	85,000	
	(3) Payment of Dividend	15,000	
	(4) Payment of Revenue-tax	25,000	
	(5) Redemption of Pref. Shares with Premium	1,05,000	3,50,000
	<b>Closing Cash Balance</b>	21,000	
	<b>Closing Bank Balance</b>	40,000	61,000

8. From the following financial statements of Mr. X , prepare a cash flow statement.

Balance sheet as at

	31.12.X4 Rs.	31.12.X3 Rs.		31.12.X4 Rs.	31.12.X3 Rs.
Capital	2,10,000	1,50,000	Property	90,000	1,00,000
Secured loan	60,000	1,30,000	Machinery	1,45,000	1,60,000
Creditors	20,400	35,600	Furniture	10,000	12,000
Bills payable	59,600	28,700	Stocks	22,000	15,000
			Debtors	45,000	30,000
			Cash balance	15,600	7,500
			Bank balance	22,400	19,800
Rs.	3,40,000	3,44,300	Rs.	3,40,000	3,44,300

Other Information:

- (a) There are no purchases or sales of fixed assets.
- (b) Mr. X has withdrawn Rs. 30,000 during the year.

**Solution:**

**Funds from Operations:**

	Rs.	Rs.
Net profit for the year:		
Capital at end	2,10,000	
Less: Capital at beginning	1,50,000	
	60,000	
Add drawing for the year	30,000	
		90,000
Add: Depreciation:		
Property	10,000	
Machinery	15,000	
Furniture	2,000	
		27,000
Funds from operation	Rs.	1,17,000

**Cash flow statement for the year 19X4**

		Rs.		Rs.
<b>Opening balance:</b>			<b>Applications of Cash:</b>	
Cash	7,500		Loan repaid	70,000
Bank	19,800		Increase in stocks	7,000
	27,300		Increase in debtors	15,000
<b>Sources of cash:</b>			Decrease in creditors	15,200
Cash from operations	1,17,000		Drawings	30,000
Increase in bills payable	30,900		<b>Closing balance:</b>	
			Cash	15,600
			Bank	22,400
				28,000
	Rs.	1,75,200	Rs.	1,75,200

Alternatively the cash flow statement can also be prepared as under:

**Cash flow statement for the year 19X4**

		Rs.	Rs.
<b>Opening balance (1.1.19X4)</b>			
Cash		7,500	
Bank		19,800	
		27,300	
<b>Add: Sources of cash</b>			
Cash from operations		1,17,000	
Increase in Bills payable		30,900	
		1,37,900	
		1,75,200	
<b>Less: Applications of Cash</b>			
Loan repaid		70,000	
Increase in stocks		7,000	
Increase in debtors		15,000	
Decrease in creditors		15,200	
Drawings		30,000	
		1,37,200	
<b>Closing balance - (31.12.19X4)</b>			
Cash		15,600	
Bank		22,400	
	Rs.	38,000	

9. Prepare the cash flow statement for the year ended 30th June 19X4 from the two balance sheets given below:

**Balance sheet as on 30th June**

Liabilities	19X4 Rs.	19X3 Rs.	Assets	19X4 Rs.	19X3 Rs.
Equity capital	6,50,000	5,00,000	Fixed assets	4,50,000	4,00,000
General reserve	1,50,000	1,00,000	Investments	1,00,000	1,00,000
Profit & loss balance	1,50,000	50,000	Sundry debtors	3,00,000	2,00,000
14% Debentures	2,00,000	2,00,000	Stock	2,50,000	2,00,000
Sundry creditors	2,00,000	2,00,000	Cash	3,15,000	1,50,000
Proposed dividend	65,000	50,000	Miscellaneous		
			expenditure	-----	50,000
Rs.	14,15,000	11,00,000	Rs.	14,15,000	11,00,000

Note: Depreciation of Rs. 50,000 was provided on fixed assets.

**Solution:**

**Funds from Operations**

	Rs.	Rs.
Net profit for the year (Closing balance - Opening balance)		1,00,000
<b>Add:</b>		
Depreciation	50,000	
Misc. Expenditure written off	50,000	
Transfer to general reserve	50,000	
Proposed dividend for the year 30.6.X4	65,000	
		2,15,000
<b>Funds from operations</b>	Rs.	3,15,000

**Cash flow statement for the year ended 30th June 19X4**

	<b>Rs.</b>	<b>Rs.</b>
Opening balance of cash (1-7-19X3)		1,50,000
<b>Add:</b>		
Issue of share capital	1,50,000	
Funds from operations	3,15,000	
		4,65,000
		6,15,000
<b>Less:</b>		
Dividend paid for the year 30.6.X3	50,000	
Acquisition of fixed assets	1,00,000	
Increase in debtors	1,00,000	
Increase in stock	50,000	
		3,00,000
<b>Closing balance of cash (30 - 6-19X3)</b>		<b>3,15,000</b>

**Note:** (1) Fixed assets purchased can be arrived at by preparing the ledger account as under:

<b>Dr.</b>	<b>Fixed assets</b>	<b>Cr.</b>
	Rs.	Rs.
To Balance b/d	4,00,000	By Depreciation
To Cash/Bank (balancing figure)	1,00,000	By Balance c/d
	Rs. 5,00,000	Rs. 5,00,000

#### 4.12 Practical Exercise:

1. The following are the Balance Sheets of Aashna Ltd. as on 31-3-99 and 31-3-2000.

**Balance Sheets**

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Equity Share Capital	1,10,000	1,20,000	Goodwill	22,000	10,000
General Reserve	14,000	18,000	Land	40,000	36,000
Profit and Loss A/c	16,000	13,000	Building	37,000	56,000
Creditors	8,000	5,400	Investments	10,000	11,000
Outstanding			Stock	30,000	25,400
Expenses	1,200	900	Debtors	19,600	21,700
Provision for			Bank balance	6,600	15,200
Taxation	16,000	18,000			
	1,65,200	1,75,300		1,65,200	1,75,300

**Additional Information :**

- (1) A piece of land was sold at Rs. 4,000.
- (2) The provision for depreciation against building was Rs. 9,000.
- (3) Provision was made for revenue-lax at Rs. 19,000 during the year.
- (4) Dividend of Rs. 10,000 was paid during the year.

From the above information, Prepare Cash Flow Statement for the year 1999-00.

2. The Balance Sheets of Nisha Ltd. for the two years were as follows. Prepare Cash Flow Statement for the year 1999-2000.

**Balance Sheets**

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Share Capital	3,30,000	4,00,000	Machinery	4,30,000	4,50,000
Share Premium		10,000	Less: Depreciation	1,40,000	1,50,000
Profit and Loss A/c	1,00,000	1,00,000		2,60,000	3,00,000
Profit during the year			Land	2,00,000	2,50,000
	-	2,00,000	Investments	20,000	35,000
6% Debentures	1,50,000	1,00,000	Stock	1,40,000	1,50,000
Profit from Redemption of Debentures			Debtors	1,00,000	1,50,000
	-	2,000	Bank balance	35,000	1,57,000
Creditors	1,40,000	1,10,000			
Provision for Taxation	50,000	1,00,000			
Proposed Dividend	15,000	20,000			
	7,85,000	10,42,000		7,85,000	10,42,000

**Additional Information :**

(1) During the year 1999-2000 a machine costing Rs. 55,000 (accumulated depreciation Rs. 35,000) was sold for Rs. 10,000. Revenue-tax of Rs. 60,000 was paid for last year.

3. The following are the summarized Balance Sheets of Suraj Ltd., for the two years 1998-99 and 1999-2000

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs	31-3-2000 Rs.
			Machinery	1,97,000	2,28,000
Share Capital :			Investments	18,000	12,000
Equity shares of Rs. 10 each	1,00,000	1,38,000	Stock	36,000	33,000
Capital Reserve	1,200	2,400	Debtors	27,000	21,900
General Reserve	24,000	28,500	Cash and Bank		
Profit & Loss A/c	18,000	30,000	Balance	7,200	6,600
15% Debentures of Rs. 100 each	60,000	30,000	Prepaid expenses	600	700
Proposed dividend	24,000	27,600	Advertisement	1,000	800
Provision for Taxation	25,000	30,800	Suspense A/c		
Creditors	18,600	12,700			
Outstanding Expenses	6,000	3,000			3,03,000
	2,76,800	3,03,000		2,76,800	

Additional Information :

During the year 1999-2000 :

- (1) One machine, whose value was Rs. 12,000 was sold at a loss of Rs. 3,000. Depreciation of Rs. 21,600 on machinery has been provided for the current year.
- (2) Investments of Rs. 6,000 have been sold at a profit of Rs. 500.
- (3) The last year's proposed dividend has been paid and Tax of Rs. 28,200 for the last year has also been paid.
- (4) 15% Debentures of Rs. 30,000 were redeemed by purchase from open market at Rs. 96 per debenture. Profit on this redemption was transferred to Capital Reserve. Prepare a Cash Flow Statement. All your calculations for this are to be shown as a part of your answer.

4. The following are the Balance-Sheets of Ria Limited, for two years; 1998-99 and 1999 – 2000.

Liabilities	31-3-99	31-3-2000	Assets	31-3-99	31-3-2000
	Rs.	Rs.		Rs.	Rs.
Equity Shares of			Goodwill	10,000	5,000
Rs. 10 each	4,70,000	7,50,000	Machinery	8,50,000	10,75,000
General Reserve	3,50,000	3,00,000	Patents	50,000	40,000
Profit & Loss A/c	80,000	86,000	Investments	1,00,000	1,25,000
Debenture			Stock	70,000	60,000
Redemption Capital			Debtors	1,50,000	1,80,000
Reserve		4,000	Cash and Bank		
10% Debentures	2,00,000	1,00,000	Balance	13,500	22,200
Creditors	60,000	91,000	Prepaid Expenses	1,500	2,800
Bills Payable	18,000	31,000			
Unpaid Expenses	2,000	3,000			
Provision for					
Taxation	50,000	70,000			
	45,000	75,000			
	12,45,000	15,10,000		12,45,000	15,10,000

Additional Information : During the year 1999-2000 :

- (1) A machine costing Rs. 1,00,000 (depreciation written off to the date Rs. 60,000) has been sold for Rs. 30,000.
- (2) Investments worth Rs. 30,000 have been sold for Rs. 35,000.
- (3) The Body corporate issued Bonus shares to the existing Equity Shareholders, by capitalizing required sum from general reserve, in the proportion of 3 : 1.
- (4) Issued new Equity Shares at the face value, as right shares, on the capital enhanced by issue of Bonus shares, in the ratio of 4 : 1.
- (5) Redeemed one half of the Debentures at Rs. 96 per debenture and the profit on redemption of debentures has been transferred to Debenture Redemption Capital Reserve.
- (6) Paid Rs. 35,000 as tax for the last year and also paid the proposed dividend of the last year.
- (7) Rs. 90,000 were provided for depreciation on machinery. From the above particulars, prepare :
  - (1) A Statement showing cash from operations.

(2) Cash Flow Statement. ,

All your calculations, necessary for this," are to be shown as part of your answer.

5. On 31-3-1999 and on 31-3-2000, the Balance-sheets of Kartavya Ltd. are as under

Liabilities	31-3-99 Rs.	31-3-2000 Rs.	Assets	31-3-99 Rs.	31-3-2000 Rs.
Equity shares of			Fixed Assets	2,00,000	5,00,000
Rs. 10 each	1,00,000	5,00,000	Investments	1,00,000	1,50,000
Capital Reserve	20,000	20,000	Stock	80,000	2,00,000
Share Premium	20,000	40,000	Debtors	1,00,000	1,50,000
General Reserve	30,000	1,00,000	Bank balance &	50,000	90,000
Profit & Loss A/c	2,30,000	2,40,000	Cash balance		
Creditors	70,000	80,000			
Provision for					
Revenue-tax	60,000	1,10,000			
	5,30,000	10,90,000		5,30,000	10,90,000

Additional Information :

- (1) During the year 1999-2000 the body corporate has sold out Machinery of Rs. 20,000 at a profit of Rs. 2,00,000 and it has credited it to Capital Reserve Account.
- (2) Given right shares at 10% premium to those shareholders whose names appear in the evidence of the body corporate as on 31-3-1999 in the ratio of two shares to the holder of one share and thereafter, from Capital Reserve, the body corporate has given 2 shares to the holder, of 3 shares fully paid up as Bonus Share at par.
- (3) Provided depreciation of Rs. 80,000- of fixed Assets. ,
- (4) Revenue-tax Rs. 70,000 was paid.

From the above information, Prepare Cash Flow Statement of the body corporate for 1999-2000.

6. The Balance-sheets of CRC Ltd. as at 31st March 19X6 and 19X7 are given hereunder :

Liabilities	31-3-19X6 Rs.	31-3-19X7 Rs.	Assets	31-3-19X6 Rs.	31-3-19X7 Rs.
Share capital	1,00,000	1,50,000	Freehold land	1,00,000	1,00,000
Share premium	-	5,000	Plant at cost	1,04,000	1,00,000
General reserve	50,000	50,000	Furniture, at cost	7,000	9,000
Profit and loss a/c	25,000	27,000	Investments	<sup>1</sup> 60,000	80,000
12% Debentures	70,000	50,000	Debtors	45,000	70,000
Provision for depreciation			Stock	60,000	65,000
Plant	50,000	56,000	Cash	30,000	45,000
Furniture	5,000	6,000			
Sundry creditors	<u>1.06.000</u>	<u>1.25.000</u>			
Rs.	4,06,000	4.69.000	Rs.	4,06,000	4.69.000

A plant purchased for Rs. 4,000 (Depreciation Rs. 2,000) was sold for cash Rs. 900 during the year. Also, an item of furniture was purchased for Rs. 2,000. These were the only transactions concerning fixed assets during the year. Depreciation on plant was provided @ 8% on cost (excluding the plant sold) and on furniture @ 12.5% on average cost.

You are required to prepare a cash flow statement for the year ended 31-3-19X7.

7. The Balance sheets of Hat & Felt Ltd. for two years are as under:

LIABILITIES	31-3-19X8 Rs.	31-3-19X7 Rs.
Equity share capital	60,000	60,000
Preference share capital	24,000	-
Profit and loss account	52,600	36,000
Proposed dividend	15,000	12,000
Bank overdraft	4,800	-
Creditors	<u>29.280</u>	<u>25,000</u>
Rs.	1,85,680	1,33,000
ASSETS		
Freehold land	65,280	16,000
Plant and machinery	57,600	41,600
Stock	43,600	40,200
Debtors	19,200	24,000
Bank	-	<u>11.200</u>
Rs.	<u>1.85.680</u>	1.33.000

The summarized revenue statement of the body corporate for the year ended 31st March, 19X8 is as under :

		Rs.	Rs.
Sales			2,40,000
Less : Cost of sales			<u>1,53,600</u>
	Gross profit		36,400
Less : Operating expenses		40,000	
Depreciation on plant		<u>8,000</u>	
			<u>48,000</u>
Profit before tax			38,400
Less : Provision for taxation			<u>14,880</u>
Profit after tax			23,520
Less : Preference dividend paid		1,920	
Proposed equity dividend >		<u>15,000</u>	
			<u>16,920</u>
	Retained earnings	Rs.	<u>6,600</u>

You are required to prepare a cash flow statement for the year.

8. Following are the summaries of the balance sheets of Computronics Ltd. as on 31st March, 19X7 and 31st March, 19X8 respectively.

Liabilities	31-3-X7	31-3-X8	Liabilities	31-3-X7	31-3-X8
Current liabilities	Rs.	Rs.	Current assets	Rs.	Rs.
Creditors	3,900	4,166	Cash and bank		
Bills payable	3,379	1,100	balances	150	1,100
Bank overdraft	7,000	-	Debtors	8,616	6,943
Provision for taxation	<u>4,000</u>	<u>5,000</u>	Stock	11,000	9,200
	<u>18,279</u>	<u>10,266</u>	Prepaid expense	<u>337</u>	<u>JM</u>
				20,103	<u>17,343</u>
Shareholders equity			Fixed assets		
Paid up capital	22,000	27,000	Land and building;	14,850	14,425
Reserves	3,000	4,000	Machinery	12,295	12,620
Profit and, loss.			Goodwill.		1,000
appropriation a/c	<u>3,969</u>	<u>4,122</u>			
	<u>28,969</u>	<u>35,122</u>		<u>26,145</u>	<u>28,045</u>
	47,248	45,388		47,248	45,388

The following additional information is supplied :-

- (i) During the year ended 31st March, 19X8 a dividend of Rs. 2,600 was paid,
- (ii) Assets of another body corporate were purchased for Rs. 5,000. These assets

consisted of stock Rs. 2,164, machinery Rs. 1,836 and goodwill Rs. 1,000. Shares of the face value of Rs. 5,000 were issued in consideration. In addition, sundry machinery worth Rs. 565 was also purchased,

(iii) Depreciation written off the body corporate's assets for the year was:

Land and building Rs. 525; Machinery Rs. 1,076.

(iv) Revenue-tax paid during the year summed to Rs. 2,877 and was charged to provision for taxation,

(v) The net profit for the year before tax was Rs. 7,630.

You are required to prepare:

A cash flow statement:

9. The following are the summarized trial balances of a limited body corporate as at 31st March 19X7 and 19X8 :

	19X7		19X8	
	Dr. Rs.	Cr. Rs.	Dr. Rs.	Cr. Rs.
Fixed assets	2,33,696	-	2,46,050	-
Current assets	96,054	-	79,180	-
Debenture discount	3,000	-	2,500	-
Issued capital : Equity	-	1,50,000	-	1,50,000
Preference	-	30,000	-	40,000
Share premium account	-	3,000	-	4,000
Debentures	-	50,000	-	50,000
Current liabilities	-	62,000	-	44,000
Provision for depreciation	-	18,000		19,500
Provision for doubtful debts	-	600		500
Interim dividend			15,000	-
Balance in profit and loss account	-	2,440		19,150
Net profit for the year	-	16,710		15,580
Rs.	3,32,750	3,32,750	3,42,730	3,42,730

(a) During the year ended 31st March, 19X8 machinery costing Rs. 20,000 (accumulated provision for depreciation Rs. 6,000) was sold for Rs. 19,000.

(b) Rs. 10.,Qf Preference share capital was issued during 19X7-X8' at a premium of 10 per cent.

(c) The net profit for 19X7-X8 was arrived at after taking credit for the profit on sale of machinery and reduction in the provision for doubtful debts and after writing off the discount on issue of debentures.

You are required to prepare :

A cash flow statement for the year.

10. The following is the Balance Sheet of M/s Megha and Swati as on 31st March, 19X8.

31-3-X7 Rs.		31-3-X8 Rs.	31-3-X7 Rs.		31-3-X8 Rs.
6,000	Outstanding		3,000	Cash	2,000
	expenses	7,000	10,000	Bank of Maharashtra	8,000
15,000	Creditors	20,000	7,000	Dena Bank	
20,000	Bills payable :	5,000	15,000	Bills receivable	25,000
	15,000 Due after		25,000	Debtors	30,000
	6 months nil		40,000	Stock	35,000
	5,000 -Within			Fixed assets :	
-	6 months -			40,000 Cost	
-	5,000			15,000 Less: Depre.	
				25,000	
	<u>20,000</u>		24,000		75,000
	<u>5,000</u>				
	Dena Bank :			Deferred revenue	
-	(Overdraft)	18,000		expenditure	
-	Medium term loan	50,000		Advertising campaign	25,000
15,000	Loan from Veena				
	Capitals :				
35,000	Megha	40,000			
35,000	Swati	<u>60,000</u>			
1,24,000	Rs.	2,00,000	1,24,000	Rs.	2,00,000

(1) The net profit during the year was Rs. 45,000.  
 (2) The drawings made by Megha and Swati were Rs. 22,000 and Rs. 12,000 respectively.

You are asked to prepare a cash flow statement for the year.

11 The following are the balance sheets of Airfield Body corporate as on 31st March, 19X6 and 19X

Liabilities	19X6 Rs.	19X7 Rs.	Assets	19X6 Rs.	19X7 Rs.
Accumulated depre on equipment			Cash	10,000	8,000
	2,30,000	2,60,000	Account receivable	30,000	40,000
Creditors	60,000	80,000	Inventory	1,20,000	1,40,000
Outstanding salaries	10,000	4,000	Equipments	6,20,000	6,50,000
Mortgage loan	1,30,000	80,000	Land	80,000	1,00,000
Share capital	4,00,000	4,00,000			
Retained profits	<u>40,000</u>	<u>1,14000</u>			
Rs.	8,60,000	9,38,000	Rs.	<u>8,60,000</u>	9,38,000

You are also informed that:

- (i) Land costing Rs. 20,000 was purchased during the year.
- (ii) Net profit for the year was Rs. 1,04,000, out of which Rs. 30,000 was paid as interim dividend.
- (iii) Equipments costing Rs. 80,000 were purchased during the year,
- (iv) Old equipments costing Rs. 40,000 (W.D.V. Rs. 20,000) were scrapped. The loss was debited to the profit and loss account.

12. The following are the extracts from the balance sheets of Mehta Construction Body corporate for the year ended on 31st March, 19X6 and 19X7.

	31-3-19X6 Rs.	31-3-19X7 Rs.
Cash	20,000	30,000
Accounts receivable	1,10,000	68,000
Inventory	2.35,000	2,56,000
Prepaid insurance	7,000	5,000
Outstanding expenses	50,000	25,000
Creditors	1,25,000	1,30,000
Taxes payable	60,000	65,000

The body corporate's profit and loss account contained the following information:

	Rs.	Rs.
Sales		10,90,000
Less : Cost and expenses	8,00,000	
Depreciation	2,00,000	
		10,00,000
Net profit :	Rs.	90,000

Prepare a cash flow statement for the year of the body corporate.

13. The following are the summarized Balance Sheets of B.C.G. Ltd. as on 31st March, 19X6 and 19X7 :

	31-3-X6		31-3-X7	
	Rs.	Rs.	Rs.	Rs.
Proprietors' equity:				
Paid up capital	1,00,000		1,00,000	
General reserve	15,000		18,000	
Dividend equalization reserve	6,400		8,000	
Profit and loss a/c	19,000		16,000	
	1,40,400		1,42,000	
Total funds	Rs. 1,40,400		1,42,000	
Employed as under :				
Fixed assets :				
Goodwill	13,000		13,000	
Buildings	46,800		45,000	
Plant	38,280		42,030	
Investments	10,000		11,250	
	1,08,080		1,11,280	
Current assets :				
Cash and bank	8,000		9,000	
Debtors	19,000		20,000	
Prepaid expenses	70		300	
Bills receivable	3,000		2,000	
Stocks	30,000		28,000	
	60,070		59,300	
Less : Current liabilities :				
Creditors	8,000		5,320	
Bills payable	1,500		900	
Accrued expenses	250		160	
Provision for taxation	19,000		21,000	
Provision for bad debts	21,000		1,200	
	29,750		28,580	
Therefore working capital		30,320		30,720
	Rs. 1,40,400		1,42,000	

The following additional information is obtained from the books : (i) The

profit for the year was Rs. 8,600 after writing off the following : Depreciation: Rs.

Building 1,900

Plant 1,250

and increasing the provision for doubtful debts by 200

(ii) Rs. 18,000 revenue tax was paid during the year, debiting provision for taxation account.

(iii) Dividend paid during the year Rs. 5,500.

(iv) Investments of the value of Rs. 5,000 were sold for Rs. 4,800 and investments of par value Rs. 8,000 (6 per cent Govt. Loans) was purchased for Rs. 6,250.

You are required to prepare cash flow statement for the year.

14. From the following balance sheets of N Ltd. on 31st December, 19X3 and 31st December 19X4 prepare a cash flow statement and a statement of changes in working capital for the year ending 31st December, 19X4

Liabilities	19X3 Rs.	19X4 Rs.	Assets	19X3 Rs.	19X4 Rs.
Equity share capital	2,25,000	2,62,500	Goodwill	45,000	35,250
General reserve	15,000	23,500	Machinery	67,500	1,44,250
Capital reserve	-	18,750	Building	75,000	56,250
Profit and loss a/C	13,500	20,250	Long term investments		
Creditors	33,000	48,750	Stock	7,500	26,250
Revenue tax			Debtors	63,750	58,500
provision	21,000	24,000	Bank balance	45,000	67,500
Proposed dividend	20,250	24,750	Bills receivable	12,750	21,000
				<u>11,250</u>	<u>13,500</u>
Rs.	3.27.750	4.22.500	Rs.	3.27.750	4.22.500

Other information:

(i) During 19X4 machinery worth Rs. 11,250 was sold for Rs. 7,000 and depreciation provided on machinery was Rs. 15,500.

(ii) Profit on sale of part of the building was transferred to capital reserve.

15. The following are the balance sheets of 'A' the proprietor.

Liabilities	31-3-X7 Rs.	31-3-X8 Rs.	Assets	31-3-X7 Rs.	31-3-X8 Rs.
Capital a/c	10,000	15,000	Fixed assets	25,000	30,000
Sundry creditors	20,000	15,000	Investments at cost	10,000	6,000
Bills payable	30,000	25,000	Stock	20,000	25,000
Bank overdraft	35,000	48,000	Debtors	35,000	34,000
			Cash	5,000	8,000
Rs.	95,000	1,03,000	Rs	95,000	1,03,000

You are further given the following information:

- (1) Fixed assets of written down value of Rs. 6,000 were sold at a loss of Rs. 500 and of written down value of Rs. -4,000 were written off, to profit & loss account, being totally destroyed. Depreciation charged to Profit and Loss a/c during the year summed to Rs. 4,500.
- (2) Investments of the cost of Rs. 6,000 were sold at Rs. 7,000.
- (3) Mr. A the proprietor had withdrawn Rs. 39,000 during the year.
- (4) Mr. A had introduced additional capital of Rs. 19,000 during the year.
- (5) Profit during the year as per profit & loss account was Rs. 25,000.

Prepare the cash flow statement for the year ending 31-3-19X8. Detailed working should form part of your answer.

16. The following are the Balance Sheets of Ganpat Gokhale, prepare a cash flow statement:

Liabilities	31-3-X1 Rs.	31-3-X2 Rs.	Assets	31-3-X1 Rs.	31-3-X2 Rs.
Term loan	1,67,500	1,52,500	Plant & machinery	1,60,000	1,70,000
Sundry creditors	29,750	35,250	Land and building	75,000	1,75,000
Loan from			Sundry debtors	45,500	32,000
Mrs. Gomati		60,000	Inventory	52,000	65,500
Bills payable	19,250	13,750	Cash and bank	14,000	29,000
Capital	1,30,000	2,10,000	balances		
Rs.	3,46,500	4,71,500	Rs.	3,46,500	4,71,500

Additional information for the year ended 31st March, 19X2 :

(i) Depreciation provided :	Rs.
On building	5,500
On plant and machinery	20,000

(ii) A machinery having W.D.V. Rs. 5,000 was scrapped and written off.

Details of capital account for the two years :

For the year ended	31-3-X1 Rs.	31-3-X2 Rs.
Opening balance	1,00,000	1,30,000
Further capital introduced	30,000	1,40,000
Net profit	30,000	
	1,60,000	2,70,000
Less : Withdrawals	30,000	40,000
Net loss		30,000
Rs.	1,30,000	2,00,000

17. Partha the proprietor of M/s Pandu Stores furnishes the following information:

Liabilities	31-3-X1 Rs.	31-3-X2 Rs.	Assets	31-3-X1 Rs.	31-3-X2 Rs.
Capital	60,000	1,00,000	Furniture and fixtures	80,000	85,000
Secured loans	1,10,000		Vehicles	60,000	1,48,000
Unsecured loans	2,00,000	3,50,000	Stock	1,40,000	1,90,000
Sundry creditors	1,45,000	1,80,000	Sundry debtors	2,00,000	2,10,000
Bank overdraft	—	18,000	Cash on hand	20,000	15,000
			Bank	15,000	—
Rs.	5,15,000	6,48,000	Rs.	5,15,000	6,48,000

Other information :

(i) Comparative capital account of the proprietor:

	31-3-X1 Rs.	31-3-X2 Rs.
Opening balance	50,000	60,000
Add : Fresh capital introduced	10,000	
Net profit	20,000	65,000
	80,000	1,25,000
Less : Drawings	20,000	25,000
Closing balance Rs.	60,000	1,00,000

(ii) Depreciation provided on furniture and fixtures Rs. 10,000 and on vehicles Rs. 20,000 for the year ended 31st March, 19X2.

(iii) An item of furniture having W.D.V. Rs. 6,000 was sold at a loss of Rs. 1,500

during the year ended 31st March, 19X2.

You are required to prepare a cash flow statement for the year ended 31st March, 19X2. Show your workings.

18. The following are the comparative Balance Sheets of the proprietary concern of Prashant Shah.

	As at 31-3-X8 Rs.	As at 31-3-X9 Rs.		As at 31-3-X8 Rs.	As at 31-3-X9 Rs.
Capital	1,00,000	1,25,000	Plant and machinery	2,00,000	2,20,000
Term loan from bank	1,50,000	1,00,000	Furniture and fittings	60,000	45,000
Unsecured loans from			Stock	1,30,000	1,50,000
relatives and friends	2,10,000	3,00,000	Sundry debtors	1,60,000	1,95,000
Sundry creditors	1,00,000	80,000	Cash and bank		
Provision for doubtful debts			balances	20,000	7,000
	10,000	<u>12,000</u>			
Rs.	5,70,000	6,17,000	Rs.	5,70,000	6,17,000

**Prashant Shah's Capital account for the year ended 31st March, 19X9.**

	Rs.		Rs.
To Life Insurance, premium	10,000	By Balance b/fd	1,00,000
" Revenue tax	2,000	" Bank	20,000
" Drawings	17,000	" Net profit	34,000
" Balance c/fd	<u>1.25,000</u>		
Rs.	1.54,000	Rs.	1.54,000

Other information for the year ended 31st March, 19X9 :

- (a) Old machinery having original cost of Rs. 20,000 on which depreciation of Rs. 15,000 was provided written off during the year.
- (b) Furniture of the book value of Rs. 15,000 is sold for Rs. 5,000.
- (c) Depreciation provided :

Plant and machinery Rs. 22,000; Furniture and fittings Rs. 8,000.

You are required to prepare a cash flow statement for the year ended 31st March, 19X9.

19. The following are the Balance Sheets of M/s M N O.

Liabilities	31-3-X7 Rs.	31-3-X8 Rs.	Assets	31-3-X7 Rs.	31-3-X8 Rs.
Capital a/cs :			Fixed assets	25,000	35,000
M	—	10,000	Furniture	10,000	8,000
N	20,000	15,000	Investments at cost	15,000	5,000
O	25,000	20,000	Stock	20,000	30,000
Creditors	45,000	31,000	Debtors	50,000	15,000
Bank overdraft	41,000	20,000	Cash balance	5,000	3,000
			Capital a/c :		
			M	6 000	—
Rs.	1,31,000	96,000	Rs.	1,11,000	96,000

Additional information for the year ended 31st March, 19X8 :

- (1) Fixed assets having written down value of Rs. 12,000 were sold for Rs. 11,000. Furniture having written down value of Rs. 3,000 was written off during the year. Depreciation provided during the year: fixed assets Rs. 5,000; furniture Rs. 1,000.
- (2) Investments costing Rs. 10,000 were sold at a profit of Rs. 2,000.
- (3) Profit as per Profit and Loss Account was Rs. 95,000.
- (4) Drawings were : M Rs. 10,000, N Rs. 30,000 and O Rs. 30,000.

Prepare cash flow statement for the year ending 31st March, 19X8. Detailed working should form part of your answer. State the assumptions, if any.

20. Rose Lux Ltd. present the following financial statements for the year ended 31st March, 19X4 and 19X5.

Liabilities	31-3-X4 Rs.	31-3-X5 Rs.	Assets	31-3-X4 Rs.	31-3-X5 Rs.
Sundry creditors	82,600	1,25,400	Cash	10,600	6,200
Bills payable	45,200	62,800	Investments	17,400	—
Loan from bank	20,000	47,000	Sundry debtors	69,200	1,05,600
Reserves and surplus	1,43,400	1,72,800	Stock in trade	91,400	1,36,600
Share capital	1.20,000	1.20,000	Net fixed assets	2.22,600	2.79,600
Rs.	4.11.200	5.28.000	Rs.	4.11,200	5.28000

Note : Depreciation written off during the year is Rs. 38,800. Investments were sold for Rs. 25,000. Interim dividend of Rs. 24,000 was paid during the year.

From the above data you are required to prepare : Cash flow Statement

and state briefly how the acquisition of new fixed assets was financed by the body corporate.

21. Prepare the cash flow statement for the year ended 30th June 19X4 from the

two balance sheets given below:

Balance sheet as on 30th June

Liabilities	19X4 Rs.	19X3 Rs.	Assets	19X4 Rs.	19X3 Rs.
Equity capital	6,50,000	5,00,000	Fixed assets	4,50,000	4,00,000
General reserve	1,50,000	1,00,000	Investments	1,00,000	1,00,000
Profit & loss balance	1,50,000	50,000	Sundry debtors	3,00,000	2,00,000
14% Debentures	2,00,000	2,00,000	Stock	2,50,000	2,00,000
Sundry creditors	2,00,000	2,00,000	Cash	3,17,000	1,50,000
Proposed dividend	67,000	50,000	Miscellaneous		
			expenditure	nil	50,000
Rs.	14,17,000	11,00,000	Rs.	14,17,000	11,00,000

Note: Depreciation of Rs. 60,000 was provided on fixed assets.

22. The following are the summarized balance sheets of Multimedia Pvt. Ltd. as on 31st March 19X4 and 31st March, 19X5:

Balance sheet

			31-3-19X5 Rs.	31-3-19X4 Rs.
Assets :				
	Premises		4,75,000	5,00,000
	Machinery		4,22,500	3,75,000
	Equipments		40,500	45,000
	Stock		74,000	1,00,000
	Sundry debtors		1,60,000	2,00,000
	Cash		7,000	3,000
	Bank •		10,000	
	Goodwill			12,500
		Total Rs.	11,89,000	12,35,500
Liabilities:				
	Share capital		5,00,000	5,00,000
	General reserve		1,50,000	1,25,000
	Profit and loss a/c		76,500	76,250
	Term loan from ICICI		1,55,000	1,75,000
	Sundry creditors		2,31,250	2,75,000
	Provision for taxation		76,250	84,250
		Total Rs.	11,89,000	12,35,500

**Other Information:**

(a) Dividend (Interim) of Rs. 25,000 was paid during the year.

(b) Depreciation is provided as under:  
Premises 5%

(c) Machinery of Rs.85,000 was acquired during the year.

(d) Revenue tax provision for the year was RS. 70,000. Prepare a cash flow statement.

23. From the following financial statements prepare a cash flow statement of AMN Ltd. for the year ended 31st March, 19X4:

Balance sheet as on

	31-3-X4 Rs.	31-3-X3 Rs.		31-3-X4 Rs.	31-3-X3 Rs.
Share capital	1,50,000	1,50,000	Building	50,000	36,000
Profit & loss a/c	60,000	45,000	Machinery	94,500	1,26,000
14% Debentures	30,000	50,000	Equipments	45,000	
Fixed deposits	68,900	75,500	Investments	55,000	45,000
Creditors	48,800	79,600	Debtors	1,26,800	1,05,000
Proposed dividend	18,000	15,000	Bank balances	12,900	99,600
Provision for taxation	15,000	12,000	Goodwill	6,500	15,500
Rs.	3,90,700	4,27,100	Rs.	3,90,700	4,27,100

**Other Information:**

(a) Depreciation is provided @ 25% on machinery and 10% on equipments. No depreciation is provided on building, (b) Investments costing 10,000 were sold for 19,000 during the year and others were also acquired, (c) Tax of Rs. 13,000 was paid for the year ended 31st March, 19X3.

24. Pooja Ltd. furnishes the following balance sheets for the years ended 31st December 19X8 and 19X9. Prepare a cash flow statement for the year ended 31st December, 19X9.

Balance sheet:

			As on 31-12-19X8 Rs.	As on 31-12-19X9 Rs.
<b>Assets :</b>				
	Land		3,50,000	4,50,000
	Building		4,75,000	4,51,250
	Inventories		45,000	60,500
	Debtors		72,600	65,800
	Prepaid expenses		14,800	15,000
	Bank balance.		26,400	6,400
	Miscellaneous expenditure		10,000	9000
		<b>Total (Rs.)</b>	<b>9,93,800</b>	<b>10,57,950</b>
<b>Liabilities:</b>				
	Equity share capital		2,00,000	2,00,000
	Preference share capital		1,50,000	1,00,000
	Reserves		50,000	65,000
	Profit & loss a/c		25,000	47,800
	Outstanding expenses		16,000	18,400
	Provision for bad debts		5,200	8,500
	Creditors		<u>5,47,600</u>	<u>6,18,250</u>
		<b>Total (Rs.)</b>	<b>9,93,800</b>	<b>10,57,950</b>

Note: (1) The body corporate had paid interim dividend of 10% on equity shares and 8% (for 6 months) on preference capital.

(2) Some preference shares were redeemed during the year.

(3) Provision for final dividend on preference shares is still to be done.

25. From the information given below, prepare a cash flow statement for Sun Industries, Ltd:

Balance sheet as on

		31-12- 19X7 Rs.	31-12- 19X8 Rs.
<b>Liabilities:</b>			
Capital		18,00,000	20,00,000
General reserve		50,000	30,000
Profit and loss a/c		1,40,000	1,60,000
Proposed final dividend		95,000	80,000
Creditors		1,10,000	1,14,000
Bank overdraft		10,000	30,000
Bills payable		13,000	10,000
Mortgage loan		<u>NIL</u>	50,000
		22,18,000	24,74,000
<b>Assets:</b>			
Freehold building		10,00,000	11,60,000
Machinery		3,40,000	4,90,000
Furniture		7,000	6,000
Cash in hand		2,000	2,000
Debtors		1,50,000	1,20,000
Bills receivable		10,000	14,000
Stock		4,40,000	4,22,000
Prepaid expenses		4,000	5,000
Investments		1,00,000	1,20,000
Goodwill		1,50,000	1,30,000
Preliminary expenses		<u>15,000</u>	5,000
		22,18,000	24,74,000

26. A body corporate who had good profits in the year ended 31-3-19X4 finds that it does not have enough liquid funds to finance its expansion activities. Its balance sheets as on 31-3-19X4 and 31-3-19X3 were as under:

Balance sheet as on

			31-3-19X3 19X4 Rs.	31-3-19X3 Rs.
<b>Assets:</b>				
Fixed assets			12,80,000	11,25,000
Closing stock			8,95,000	2,85,000
Debtors			5,02,500	5,70,000
Cash balance			11,000	60,000
Bank balance			<u>NIL</u>	21,10,000
	<b>Total</b>		26,88,500	22,50,000
<b>Liabilities:</b>				
Share capital			7,25,000	6,75,000
Reserves			14,25,000	8,50,000
Creditors			4,18,500	7,25,000
Bank overdraft		<b>Total</b>	1,20,000	22,50,000
			26,88,500	

Depreciation charged on fixed assets was Rs. 55,000. Interim dividend of 10% was paid on the opening capital.

You are requested to prepare a statement showing the directors, where the liquid funds-generated from the business have been utilized.

27. Following is the balance sheets of Shrihari Ltd.

Liabilities	31-3-X1 Rs.	31-3-X2 Rs.	Assets	31-3-X1 Rs.	31-3-X2 Rs.
Equity share capital	3,00,000	4,00,000	Goodwill	1,00,000	80,000
8% Redeemable			Land and building	2,00,000	1,70,000
pref. share capital	1,50,000	1,00,000	Plant	80,000	2,00,000
Capital reserve		20,000	Investment	20,000	30,000
General reserve	40,000	50,000	Sundry debtors	1,40,000	1,70,000
Profit and loss a/c	30,000	48,000	Stock	77,000	1,09,000
Proposed dividend	42,000	50,000	Bills receivable	20,000	30,000
Sundry creditors	25,000	47,000	Cash in hand	15,000	10,000
Bills payable	20,000	16,000	Cash at bank	11,000	8,000
Liability for expenses	31,000	36,000	Preliminary expenses	15,000	10,000
Provision for taxation	<u>40,000</u>	<u>50,000</u>			
Rs.	6,78,000	8,17,000	Rs.	6,78,000	8,17,000

Notes:

- (a) A piece of land had been sold out in 19X2 and profit on sale has been credited to capital reserve.
- (b) A machine has been sold for Rs. 8,000. The written down value of the machine was Rs. 12,000. Depreciation of Rs. 10,000 is charged on plant account in 19X2.
- (c) The investments are trade investments Rs. 3,000 by way of dividend is received including. Rs. 1,000 from pre-acquisition revenue which has been credited to investment account.
- (d) An interim dividend of Rs. 20,000 has been paid in 19X2. Prepare cash flow statements.

28. From the following data, compute cash from operations:

	01-01-19X8 Rs.	31-12-19X8 Rs.
Sundry debtors	90,000	1,20,000
Sundry creditors	1,44,000	90,000
Outstanding expenses	9,000	18,000
Outstanding revenue	3,000	3,000
Stock in trade	1,65,000	1,80,000
Prepaid expenses	10,000	6,000
Accumulated depreciation	1,50,000	1,80,000
Provision for doubtful debts	4,500	6,000
Dividends payable	—	9,000
Bills receivable	30,000	36,000
Bills payable	25,000	18,000
Net profit for the year	—	2,40,000

29. Prepare a statement of cash flow from the following balance sheet:

Balance Sheet

	31-3-X4 Rs.	31-3-X3 Rs.		31-3-X4 Rs.	31-3-X3 Rs.
Capitals	4,35,000	3,87,000	Fixed assets	3,26,500	3,80,000
Creditors	46,000	67,000	Debtors	1,20,200	42,300
			Cash balance	4,800	5,700
			Stock	29,500	26,000
Total Rs.	4,81,000	4,54,000	Rs.	4,81,000	4,54,000

Other information:

- (a) Depreciation @ 20% was provided on fixed assets.
- (b) Drawings during the year were Rs. 35,000.

30. From the following balance sheets of Titan Textiles Ltd., prepare a statement of cash flow for the year 19X4

	31-12-19X3 Rs.	31-12-19X4 Rs.
Assets:		
Fixed assets (cost)	15,40,000	18,60,000
Investments	80,000	2,40,000
Current assets	7,22,000	11,25,000
Preliminary expenses	30,000	<u>15,000</u>
	Total (Rs.)	<u>23,72,000</u>
		<u>32,40,000</u>
Liabilities:		
Share capital - Equity	9,00,000	12,50,000
Preference	6,00,000	3,00,000
Secured loans	3,00,000	4,00,000
Profit and loss account	3,30,000	8,10,000
Provision for bad debts	32,000	45,000
Current liabilities	2,10,000	4,35,000
	Total (Rs.)	23,72,000
		32,40,000

Other information:

- (a) Machine costing Rs. 2,10,000 (WDV Rs. 5,000) was scrapped during the year and obsolete.
- (b) Preference shares were redeemed at 3% premium.
- (c) Depreciation for fixed assets for 19X4, was Rs. 2,00,000.
- (d) Stock costing Rs. 90,000 was overvalued at Rs. 1,90,000 as on 31-12-19X4.

31. From the following financial statements of Analysis Ltd., prepare a cash flow statement for the year ended 31st March, 19X4:

Balance Sheet

Liabilities	31-3-X4 Rs.	31-3-X3 Rs.	Assets	31-3-X4 Rs.	31-3-X3 Rs.
Share capital	1,40,000	1,40,000	Fixed assets	1,82,000	1,00,000
Debentures	82,000	Nil	Inventory	80,000	30,000
Profit and loss a/c	20,000	14,000	Debtors	40,000	20,000
Creditors	84,000	30,000	Cash on hand	24,000	34,000
Total	Rs.	3,26,000	1,84,000	Rs.	3,26,000
					1,84,000

Profit and loss account for the year ended 31st March, 19X4

	Rs.		Rs.
To Opening stock	30,000	By Sales	2,00,000
" Purchases	1,96,000	" Closing stock	80,000
" General expenses	22,000		
" Depreciation	16,000		
" Net profit c/d	<u>16,000</u>		
Rs.	<u>2,80,000</u>	Rs.	<u>2,80,000</u>
To Interim dividend	10,000	By Balance b/d	14,000
" Balance c/d	<u>20,000</u>	" Net profit b/d	<u>16,000</u>
Rs.	<u>30,000</u>	Rs.	<u>30,000</u>

32. From the following balance sheet of XYZ Ltd., prepare the cash flow statement:

	19X2 Rs.		19X3 Rs.
<b>Assets;</b>			
Land	1,83,000		1,98,000
Machinery	6,00,000		7,25,000
Less: Accumulated depre.	<u>1,20,000</u>		<u>1,45,000</u>
	4,80,000		5,80,000
Loan to director	25,000		Nil
Investments	30,000		40,000
Inventory	1,62,000		1,48,000
Debtors	1,20,000		1,62,000
Bank balance	67,000		98,000
Total (Rs.)	<u>10,67,000</u>		<u>12,26,000</u>
<b>Liabilities:</b>			
Equity share capital	4,50,000		6,00,000
Share premium	Nil		15,000
Profit and loss account	60,000		1,10,000
18% Debentures	2,52,000		2,00,000
Profit on redemption of debentures	Nil		1,000
Sundry creditors	2,20,000		1,90,000
Provision for taxation	40,000		50,000
Proposed dividend	45,000		60,000
Total (Rs.)	10,67,000		12,26,000

During the year, plant costing Rs. 40,000 was sold for Rs. 18,000. Accumulated depreciation was Rs. 20,000. Tax paid during the year was Rs. 55,000.

33. The following are the summarized balance sheets of Shraddha Ltd. as at 31st December, 19X5 and 31st December, 19X6

	31-12-19X5 Rs.	31-12-19X6 Rs.
<b>Liabilities:</b>		
Equity share capital	8,00,000	9,60,000
Share premium a/c	-	40,000
Reserves	1,20,000	2,00,000
Profit and loss account	1,92,000	2,76,000
Secured loans	2,00,000	
Creditors	5,20,000	5,60,000
Proposed dividend	80,000	96,000
<b>Total (Rs.)</b>	<b>19,12,000</b>	<b>21,32,000</b>
<b>Assets:</b>		
Freehold land	4,20,000	5,60,000
Plant and machinery (at WDV)	6,00,000	6,80,000
Furniture (at WDV)	12,000	24,000
Inventories	5,20,000	4,20,000
Debtors	3,00,000	3,40,000
Cash	60,000	1,08,000
<b>Total (Rs.)</b>	<b>19,12,000</b>	<b>21,32,000</b>

**Other information:**

- (a) Machinery having book value Rs.28,000 was sold for Rs. 15,000.
- (b) Depreciation provided on furniture was Rs. 2,000 and on plant and machinery Rs. 65,000.
- (c) Interim dividend of 10% was paid on opening share capital. Prepare a cash flow statement.

34. The directors of Protex Ltd. would like to know where the liquidity generated from the business operations has been utilized during 19X4. The following balance sheets are given for the same.

		31-12-19X3 Rs.	31-12-19X4 Rs.
<b>Liabilities:</b>			
Share capital		15,00,000	15,00,000
Reserves and surplus		80,000	1,20,000
Bank overdraft		2,50,000	9,00,000

Creditors		3,00,000	9,10,000
	Total (Rs.)	21,30,000	34,30,000
Assets:			
Land and buildings		4,50,000	7,50,000
Plant and machinery		7,50,000	9,00,000
Less: Depreciation		1,80,000	2,70,000
		5,70,000	6,30,000
Stock		4,20,000	11,40,000
Debtors		6,90,000	9,10,000
	Total (Rs.)	21,30,000	34,30,000

**Other information:**

(a) Debtors are net of provision for bad debts for 19X3 and 19X4 Rs. 5,000 and Rs. 10,000 respectively.

(b) A plant costing Rs. 15,000 (WDV Rs. 3,000) was scrapped during the year.

35. From the following information you are required to prepare cash flow statements of Sneha Stores Ltd. for the year 31-3-19X5:

**Balance sheet as on**

Liabilities	31-3-X4 Rs.	31-3-X5 Rs.	Assets	31-3-X4 Rs.	31-3-X5 Rs.
Share capital	2,10,000	2,10,000	Plant and machinery	1,50,000	2,73,000
Secured loans	-	1,20,000	Inventory	45,000	1,20,000
Creditors	42,000	1,17,000	Debtors	15,000	60,000
Provision for tax	3,000	9,000	Cash	68,000	21,000
Profit & loss a/c	26,000	30,000	Prepaid expenses	4,000	12,000
Rs.	2,82,000	4,86,000	Rs.	2,82,000	4,86,000

Dr. Profit & loss a/c for the year 31-3-19X5			Cr.
	Rs.		Rs.
To Opening stock	45,000	By Sales	3,00,000
“ Purchases	2,94,000	“ Closing stock	1,20,000
“ General expenses	33,000		
“ Depreciation	24,000		
“ Provision for tax	12,000		
“ Net profit	12,000		
Rs.	4,20,000		Rs. 4,20,000
To Dividend	3,000	By Balance b/d	21,000
“ Balance c/d	30,000	“ Net profit	12,000
Rs.	33,000		Rs. 33,000

36. The chief accountants of a toy manufacturing body corporate has prepared the annual financial statements for 19X4 as under:

Balance sheet

	19X3	19X4
	Rs.	Rs.
<b>Assets:</b>		
Goodwill	10,00,000	Nil
Buildings	28,00,000	40,50,000
Land	7,50,000	7,00,000
Machinery	10,00,000	16,50,000
Tools	3,50,000	2,00,000
Investments	75,000	90,000
Inventories -	10,90,000	10,50,000
Sundry debtors	4,60,000	9,00,000
Bills receivable	1,35,000	1,05,000
Cash in hand	45,000	10,000
Un expired insurance	7,000	6,000
Preliminary expenses	13,500	10,500
	77,25,500	87,71,500
<b>Liabilities:</b>		
Equity share capital	20,00,000	35,00,000
14% Debentures	5,00,000	7,50,000
Retained earnings	39,19,000	26,85,500
Fixed deposits	34,000	7,500
Bills payable	50,000	45,000
Sundry creditors	2,60,000	2,90,000
Bank overdraft	-	40,000
Accumulated depreciation	9,05,000	13,5,6,000
Provision for bad debts	11,500	22,500
Provision for taxation	15,000	25,000
Accrued interest	31,000	50,000
Total	77,25,500	87,71,500

Additional information:

- Equity shares were issued at 5% premium. The premium was transferred to retained earnings.

(ii) Old machinery costing 22,500 was scrapped. The accumulated depreciation on the same was 16,500.

(iii) Depreciation was charged as:

(a) Buildings 1,40,000 (b) Machinery 3,27,000

(iv) No new tools were purchased.

Prepare a cash flow statement from the above.

## **Unit : 5 : Ratio Analysis**

### **Introduction:**

In traditional accounting, the main function of the accountant is to prepare profit and loss account and Balance Sheet. Profit and loss account discloses the profit or loss of the period where as the Balance sheet shows the states of affairs on a particular date. But, the functions of the accountant do not end at this stage in this competitive environment. He should be able to analyze and interpret the figures as disclosed by these statements to understand accurately the financial effect of various transaction and health of the enterprise. The study of techniques of analysis and interpretation of accounts would therefore, be interesting and useful. Now a days the work of analysis and interpretation is extensively used in the industry and for the purpose they use various tools and the biggest tool for the purpose may be considered is the ratio analysis. For the purpose of analyze and interpretation, studies of ratio analysis is essential. The ratio analysis is more important because it considers financial as well as non financial aspects of the business such as quantitative analysis etc. No doubt, due to extensive use of computers in interpretation and analysis, the work is simplified but still the ratio analysis has retain its position.

## **Structure of the chapter :**

- 5.1 Objectives**
- 5.2 Accounting Ratios**
- 5.3 Interpretation Through Ratios**
- 5.4 Techniques And Purposes Of Analysis**
- 5.5 Classification Of Accounting Ratios**
- 5.6 Balance Sheet Ratios**
- 5.7 Composite Ratios**
- 5.8 Utility Of Ratio Analysis**
- 5.9 Limitations Of Ratio Analysis**
- 5.10 Rearrangement Of Financial Statements**
- 5.11 Exercise**

### **5.1 Objectives:**

By the end of this chapter, the student will come know about

- Concept of ratio analysis
- Need for ratio analysis
- Various types of ratios
- Usefulness of ratio analysis
- Limitation of ratio analysis

### **5.2 Accounting Ratios**

Financial statements prepared by a company at the end of every year is used by various people. Financial Statements prepared by a body corporate is used by wide variety of persons which includes prospective investors, creditors and even management. If relationship between various related items in these financial statements are found out and established through ratios, they can provide useful clues to understand accurately the financial health and ability of business to make profit. From such ratios various uses can take their decisions. Like shareholders can take their decision regarding investment in the business by seeing dividend pay out ratio, earning per share ratio etc. Ratios also help in detecting any adverse trends present in the financial statements. So, it can help the management in determining the areas where they will have to concentrate.

Today, ratios has assumed such an importance that anybody connected with the business turns to ratio for measuring the financial strength and earning capacity of the business. E.g. a banker or other creditor will measure the repaying capacity and financial strength on the basis of accounting ratios.

The Balance Sheet and the Statement of Income are essential, but they are only the starting point for successful financial management. Apply Ratio Analysis to Financial Statements to analyze the success, failure, and progress of your business.

Ratio Analysis enables the business owner/manager to spot trends in a business and to compare its performance and condition with the average performance of similar businesses in the same industry. To do this compare your ratios with the average of businesses similar to yours and compare your own ratios for several successive years, watching especially for any unfavorable trends that may be starting.

*In finance, ratios are usually two financial statement items that may be related to one another and may provide the prudent user a good deal of information. Of the myriad of ratios that could be generated, some will be more meaningful than others.*

Without ratios, total interpretation of accounts is almost impossible. Ratio will help in understanding the facts of the accounts, which are not apparent in from the records. A ratio can be expressed in three different ways. It proportion, e.g. 3 : 1. Second in percentage, e. g. 40%. Third in rates, e.g. 8 times a year.

### **5.3 Interpretation Through Ratios**

A ratio can not be useful unless it is analyzed or interpreted and so after finding ratios, it can be compared with the ideal ratio prevailing in industry or with the past ratios or with the ratios of any firm in the same field so, that the proper results can be obtained. Ratios, as shown above, are relative figures reflecting the relationship between variables. They enable analysts to draw conclusions regarding financial operations. The use of ratios, as a tool of financial analysis, involves their comparison, for a single ratio, like absolute figures, fails to reveal the true position. Four types of comparisons are involved: (i) trend ratios, (ii) inter-firm comparison, (iii) comparison of items within a single year's financial statement of a firm, and (iv) comparison with standards or plans.

### **5.4 Techniques And Purposes Of Analysis**

Accounting ratios are generally classified as follows

**Revenue Statement Ratios** : e.g. Gross profit ratio, Net Profit ratio. Such ratio interprete the results of revenue statements.

**Balance Sheet Ratios** : e.g. Current ratio, liquidity ratio. Such ratio interprete the results of balance sheet.

### **5.5 Classification Of Accounting Ratios Revenue Statement Ratios**

The ratios computed showing relationship between the two items of profit

and loss account are enumerated below :

- (a) Gross Profit Ratio
- (b) Operating Ratio
- (c) Expense Ratio
- (d) Net Profit Ratio

**(a) Stock Turnover**

**(A) Gross Profit Ratio**

$$\text{Gross Profit Ratio} = \text{Gross Profit}/\text{Sales} \times 100$$

Such ratio help in understanding the profitability of the business from the basic operations. It is a ratio expressing relationship between Gross Profit earned to Net Sales. It is a useful indication of the profitability of business.

This ratio should be high as far as possible. If this ratio is low, it indicates that the cost of sales is high or that the buying is inefficient. It means the profit is high or cost is low.

**(B) Operating Ratio**

$$\text{Operating ratio} = \text{Operating expenses}/\text{sales} * 100$$

It shows what to what extent the amount is expended for the purpose of different expenses, this expenses may be related with the cost of goods sold as well as the other administrative expenses. It is a ratio showing relationship between Cost of goods sold plus Operating expenses and Net Sales. It shows the efficiency of the management. The higher the ratio, the less will be the margin available to proprietors. This ratio is also usually expressed as a percentage. It should be lesser as far as possible.

$\text{Cost of Sales} = \text{Opening stock} + \text{Net purchases} + \text{Purchases expenses} - \text{Closing stock}$

OR

$\text{Cost of Sales} = \text{Net Sales} - \text{Gross Profit}$

**(C) Expense Ratio**

It is computed by dividing expenses by sales. The term 'expenses' includes (i) cost of goods sold, (ii) administrative expenses, (iii) selling and distribution expenses, (iv) financial expenses but excludes taxes, dividends and extraordinary losses due to theft of goods, good destroyed by fire and so on. There are different variants of expenses ratios. That is,

$$\text{Expense Ratio} = \text{Expenses} / \text{Sales}$$

This ratio shows the proportion of the amount of sales which is used for the purpose of different expenses. This ratio is calculated mainly for the purpose of ascertaining relationship between operating expenses and net sales, expense ratios are computed. Some accountants calculate expenses ratio in respect of raw-material consumed, direct wages and factory expenses. In all these ratios in denominator sales is written.

This ratios should be lesser as far as possible. These ratios over a number of years will reveal the extent to which expenses vary in relation to sales.

**(D) Net Profit Ratio**

$$\text{Net Profit Ratio} = \frac{(\text{Net Profit} \times 100)}{\text{Net Sales}}$$

This ratio can be treated as profitability ratio and it shows mainly the relations of profit earned with the sales. This ratio is very much useful to the management. And this ratio should be higher as far as possible. The ratio is valuable for the purpose of ascertaining the over-all profitability of business and shows the efficiency of the operations of the business. This ratio is widely used for the purpose of interpretation.

**(E) Stock Turnover**

$$\text{Stock turnover} = \frac{\text{Cost of goods sold}}{\text{Average Stock}}$$

This ratio is mainly related with the movement of the stock. This ratio shows the times for which the stock is moving during the year. The number of times the average stock is turned over during the year is known as stock turnover. It is computed by dividing the cost of goods sold by the average stock in the business. This ratio is of very much helpful to the management in taking their decisions. The ratio is very important in judging the ability of management with which it can move the stock. The higher the turnover ratio, the more profitable the business would be. So, such ratio should be higher as far as possible. Average stock is the average of opening and closing stock of the year.

## 5.6 Balance Sheet Ratios

The ratios based on comparison of items taken from balance sheet are given below :

- (1) Current Ratio
- (2) Liquid Ratio
- (3) Quick Ratio
- (4) Proprietary Ratio
- (5) Debt-Equity Ratio
- (6) Gearing Ratio
- (7) Long-term Debts to Fixed Assets

### **(1) Current Ratio**

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

There are mainly two types of assets used in the business. One is fixed assets and the other is current assets. A very big amount of the capital investment is blocked in the current assets. Against that during the normal course of the business, they generate current liabilities due to takings of credits from the various people. Normally, a liability which will mature within a period of 12 months is a current liability. They consist of creditors, bills payable, bank overdraft, outstanding expenses, provision for taxation etc. Similarly, current assets are in the form of cash or can be readily converted into cash within a

short time. They include cash, bank balance, stock, debtors, bills receivable, prepaid expenses, accrued revenue, readily marketable securities etc.

This ratio indicates the relationship of current assets with the current liabilities. If this ratio is found to be two then it indicates there is a current assets of two ruppes against current liabilities of one rupee. It is generally believed that 2 : 1 ratio shows a comfortable working capital position. However, this rule should not be taken as a hard and fast rule, because a ratio which is satisfactory for one business may not be satisfactory for the other. This most widely used ratio shows the proportion of current assets to current liabilities. The ratio is obtained by dividing current assets by the current liabilities. What should be the standards ratio, that question is depending upon nature of the business and its transactions. There may be instances when an enterprise may function satisfactorily even with a current ratio of one to one or less and some enterprises require much higher ratio than 2 to 1. The need for safety margin arises from the inevitable unevenness in the flow of funds through the current assets and liabilities account. The fact that a firm may rarely count on such an even flow requires that the size of the current assets should be sufficiently larger than current liabilities so that the firm would be assured of being able to pay its current maturing debt as and when it becomes due. It is important to note that a very high ratio of current assets to current liabilities may be indicative of slack management practices, at the same time, the firm may not be making full use of its current borrowing capacity. Therefore, a firm should have a reasonable current ratio.

Current Assets = Cash and Bank balance + Stock + Debtors + B/R + Prepaid expenses + Investments readily convertible into cash + Loans and advances.

Current Liabilities = Creditors + B/P + Bank O/D + Unclaimed dividend + Provision for Taxation + Proposed dividend.

So, in simple words, The current assets of a firm, as already stated, represent those assets which may be, in the ordinary course of business, converted into cash within a short period of time, normally not exceeding one year. The current liabilities defined as liabilities which are short-term maturing obligations to be met, as originally contemplated, within a year.

### **Liquid Ratio**

Liquid ratio = Liquid assets/Liquid liabilities

Here, liquid assets means all current assets except closing stock where as liquid liability means all current liability less bank overdraft. As observed above, one defect of the current ratio is that it fails to convey any information on the composition of the current assets of a firm. A rupee of cash is considered equivalent to a rupee of inventory or receivables. But it is not so. A rupee of cash is more readily available (i.e. more liquid) to meet current obligations than a rupee of, say, inventory. This impairs the usefulness of the current ratio. Stock is not treated as a liquid asset because it cannot be readily changed into cash as and when required. Bank overdraft is not involved in liquid liabilities because bank overdraft is not likely to be called on demand and is treated as a sort of

permanent mode of financing. The liquid ratio which is mainly designed to show the cash available to meet immediate payments. It is obtained by dividing the liquid assets by liquid liabilities. If the liquid assets are equal to or more than liquid liabilities, the condition may be considered as satisfactory. The quick ratio is a more rigorous and penetrating test of the liquidity position of a firm.

### **Acid-Test Ratio**

$$\text{Acid-test Ratio} = \text{Quick Assets} / \text{Liquid Liabilities}$$

Here in this ratio only cash factors of current assets are considered and no other factor will be considered. It is computed by dividing the worth of quick assets by liquid liabilities. Here, quick assets do not include both stock and debtors, because payments from debtors would not generally be received immediately when liquid liabilities are to be paid. The acid-test ratio is a rigorous measure of a firm's ability to service short-term liabilities. The usefulness of the ratio lies in the fact that it is widely accepted as the best available test of the liquidity position of a firm.

### **Proprietary Ratio**

$$\text{Proprietor's ratio} = \text{Proprietor's fund} / \text{Total Assets}$$

This ratio shows the relationship of proprietor's fund with the total assets means that to what extent the assets of the business is financed by proprietor's fund. The ratio shows the proportion of proprietors' funds to the total assets employed in the business. The proprietors' funds or shareholders' equity consist of share capital and reserves & Surplus. This ratio should be higher as far as possible means the the higher the ratio, the stronger the financial position of the enterprise, as it signifies that the proprietors have provided larger funds to purchase the assets.

Moreover, a very high ratio is also not desirable, because it means that insufficient use is being made of outside funds.

### **Debt-Equity Ratio**

$$\text{Debt-Equity Ratio} = \frac{\text{Long term Liabilities}}{\text{Shareholders Funds}} \times 100$$

This ratio indicates the capital mix in the business. It shows to what extent debt is involved in the business against the owner's funds. It shows the proportion of long-term External Equities and Internal Equities.

This ratio reflects the relative claims of creditors and shareholders against the assets of the firm. Alternatively, this ratio indicates the relative proportions of debt and equity in financing the assets of a firm.

### **Capital Gearing Ratio**

$$\text{Capital gearing ratio} = \text{Fixed interest bearing capital} / \text{equity capital}$$

Normally, two types of capital is usually available in the business. One is demanding fixed rate of return at the end of specific period which mainly include preference share and debentures. Whereas the other capital is that type which is not demanding any amount of fixed return at the end of specific period. Such capital includes equity capital. This ratio indicates the relationship and capital mix of fixed interest bearing capital with the normal

capital. In other words, it is the ratio of fixed dividend bearing capital to ordinary capital. The higher this ratio, the capital structure of the body corporate is said to be highly geared.

### **Long term Funds to Fixed Assets**

This ratio indicates to what extent the long term assets are financed by the long term funds in the business. Normally, the fixed assets of business must be purchased out of Fixed Capital only, which includes share capital, reserves and long term liabilities. The ratio must be 1 : 1 or more.

$$\text{Long term Funds to Fixed Assets Ratio} = \frac{\text{Long term Funds}}{\text{Fixed Assets}}$$

$$\text{Where Long-term Funds} = \text{Share Capital} + \text{Reserves} + \text{Long term Liability}$$

### **5.7 Composite Ratios :**

Here, in this type of ratios on item will be from profit and loss account and other will be balance sheet. The ratios expressing relation between one item of Profit and Loss Account and the other item from Balance Sheet are combined or composite ratios. The following are some of these ratios :

#### **(1) Return on Investment :**

- (i) Return on Capital Employed
- (ii) Return on Shareholders' Funds
- (iii) Return on Equity Shareholders' Funds\*.

#### **(2) Debtors' Turnover (Debtors' Ratio)**

#### **(3) Creditors' Turnover (Creditors' Ratio)**

#### **(4) Fixed Assets Turnover Ratio.**

#### **(5) Total Assets Turnover.**

#### **(6) Debt Service Coverage Ratio.**

#### **Return on Investment :**

This ratio is concerned with the overall profitability of the business. It shows profitability from various angles. Profitability may be from the point of view of firm as a whole or from the angle of the equity shareholders etc. This ratio should be higher as far as possible. Return on investment indicates the profitability of business and is very much in use among financial analysts. Under this head, we shall study three different ratios:

- (i) Return, on capital employed (ii) Return on shareholders' funds (iii) Return on equity.

#### **Return on Capital Employed**

$$\text{Return on Capital Employed} = \frac{\text{Net Profit}}{\text{Capital Employed}} \times 100$$

Here, this ratio indicate the profitability of the business from the angle of the firm as a whole. This ratio should be higher as far as possible. This ratio shows the

rate of return on the capital employed. This ratio is of very much use to the management of the company. The term Capital Employed includes share capital, reserves and long term loans such as debentures.

It must be remembered that in this ratio Net Profit is Profit before deducting Interest and Taxes = EBIT (Earnings before interest and taxes)

Where Capital Employed = Share Capital + Reserves + long Term Loan

#### **Return on Shareholders' Funds**

Return on Shareholders' Funds =  $\frac{\text{Net Profit}}{\text{Shareholders Funds}} \times 100$

This ratio is also showing the profitability of the business but this profitability is indicated from the angle of the shareholders. From this ratio is, the shareholders in the business can make out to what extent they earned by making investment in the business. So, this ratio is very much useful to the shareholders of the business. Proprietors' Funds include share capital and reserves. It also indicates whether the return on proprietors' funds is enough in relation to the risks that they undertake. The profit should be after interest and tax i.e. PAT - Profit After Tax.

#### **Return on Equity Shareholders 'Funds'**

Return of Equity Shareholders Fund =  $\frac{\text{Net Profit} - \text{Preference Dividend}}{\text{Ordinary Share Capital} + \text{Free Reserves}} \times 100$

It shows what percentage of profit is earned on the capital invested by ordinary shareholders. The ratio is obtained by dividing net profit after deduction of preference dividend by the sum of ordinary share capital plus free reserves.

In case of all the above three ratios, fictitious assets given in the balance sheet must be deducted in the denominator.

#### **Debtors' Ratio:**

(i) Firstly, average daily sales is found out then (ii) Collection period is determined.

Average Daily Sales = Credit Sales / 365

(i) Debtors' Ratio =  $\frac{\text{Debtors} + \text{Bills Receivable}}{\text{Average Daily Sales}}$

Alternative Formula : Instead of calculating average daily sales as above, the following formula may be used to find out Debtors Ratio

(ii) Debtors Ratio =  $\frac{\text{Debtors} + \text{Bills Receivable} \times 365}{\text{Credit Sales}}$

This ratio indicates the credit policy of the business. It shows that to what extent the amount is blocked in the debtors of the company. For the better management of the current assets this ratio should be lower as far as possible. The ratio shows the number of days taken to collect the dues of credit sales. The ratio is computed by dividing the sum of debtors and bills receivable by the average daily sales. The average daily sales is obtained by dividing the total annual sales by 365.

### **Debtors Turnover:**

Debtors Turnover = Credit Sales/Average Debtors

Where Average Debtors = Opening Debtors + Closing Debtors/2

If B/R is given, it should be involved in the debtors.

The debtors turnover suggests the number of times the sum of credit sale is collected during the year, while debtors ratio indicates the number of days during which the dues for credit sales are collected. Suppose the debtors ratio is 73 days, it means that debtors pay their dues for credit sales after 73 days of making the sales.

It means that during the year the collection for credit sales is made 5 times during the year ( 365 days/73 days = 3).

#### **(1) Creditors Velocity or Creditors Ratio**

Creditors' Ratio = Creditors + Bills Payable /Average Daily Purchase

Creditors Velocity = Creditors + Bills Payable/Annual Purchase  $\times$  365

Creditors Turnover = Credit Purchases/ Average Creditors

If creditors Ratio or Average Payment Period is to be calculated on the basis of Creditors Turnover, it will be done as follows :

Creditors Ratio = 360 or 365/Creditors Turnover

It shows the number of days within which we make payment to our creditors for credit purchases is obtained from creditors velocity. This ratio is helpful to the management and it also shows the buying efficiencies of the management. This ratio shows what credit period is given by the creditors to us. It helps the management in making arrangement in the working capital need. This ratio should be higher as far as possible so that comparatively there will be less need of working capital. Suppose the credit period is 45 days, i.e. our creditors allow us a credit period of 45 days.

#### **Fixed Assets Turnover**

Fixed Assets Turnover = Sales

Fixed Assets

This ratio is showing that to what extent the sale is generated by making investment in the fixed assets. This ratio should be higher as far as possible. The more the sales in relation to the sum invested in fixed assets, the more efficient is the use of fixed assets.

#### **(2) Total Assets Turnover**

Total Assets Turnover = Sales/Total Assets

Total assets includes not only fixed assets as well as it includes current assets as well. This ratio shows to what extent sale is achieved by making investments in the total assets of the business. This ratio should be higher as far as possible. This ratio is very much helpful to the management of the business.

### **Debt Service Coverage Ratio:**

This ratio is indicating that to what extent the business has generated profits for the purpose of debt repayment. It means calculation is made as to how many times the profit covers the payment of principal and interest on loan.

Debt repayment mainly includes the installments for the purpose of debt repayment as well as the interest on it. When a creditor or bank lends money to the business, he always examines the paying capacity of the borrower. This ratio is very much useful to the lender of the money for checking the efficiencies of the person taking the money.

**Debt Service Coverage Ratio:** Profit available for debt repayment/Install. +Interest

Here Profit means profit available for payment of debt

*Profit = Profit after tax + Depreciation and other non-cash adjustments + interest payable on loan*

Debt Service Coverage ratio = Profit available for Debt Payment/installment of principal + Interest

**Coverage Ratios** The second category of leverage ratios are coverage ratios. These ratios are computed from information available in the profit and loss account. For a normal firm, in the ordinary course of business, the claims of creditors are not met out of the sale proceeds of the permanent assets of the firm. The obligations of a firm are normally met out of the earnings or operating profits. These claims consist of (i) interest on loans, (ii) preference dividend, and (iii) amortisation of principal or repayment of the instalment of loans or redemption of preference capital on maturity. The soundness of a firm, from the view-point of long-term creditors, lies in its ability to service their claims. This ability is indicated by the coverage ratios. The coverage ratios measure the relationship between what is normally available from operations of the firms and the claims of the outsiders. The important coverage ratios are: (i) interest coverage, (ii) dividend coverage, (iii) total coverage, (iv) total cashflow coverage, and (v) debt service coverage ratio.

**Interest Coverage Ratio** It is also known as 'time-interest-earned ratio'. This ratio measures the debt servicing capacity of a firm insofar as fixed interest on long-term loan is concerned. It is determined by dividing the operating profits or earnings before interest and taxes (EBIT) by the fixed interest charges on loans. Thus,

EBIT

Interest coverage =  $\frac{\text{EBIT}}{\text{Interest}}$

It should be noted that this ratio uses the concept of net profits before taxes because interest is tax-deductible so that tax is calculated after paying interest on long-term loan. This ratio, as the name suggests, shows how many times the interest charges are covered by the EBIT out of which they will be paid. In other words, it indicates the extent to which a fall in EBIT is tolerable in the sense that the ability of the firm to service its interest payments would not be adversely affected. For instance, an interest coverage of 10 times would imply that even if the firm's EBIT were to decline to one-tenth of the present level, the net profits available for servicing the interest on loan would still be equivalent to the claims of the creditors. On the other hand, a coverage of five times would

indicate that a fall in operating earnings only to upto one-fifth level may be tolerated. From the point of view of the creditors, the larger the coverage, the greater is the ability of the firm to handle fixed-charge liabilities and the more assured is the payment of interest to the creditors. However, too high a ratio may imply unused debt capacity. In contrast, a low ratio is a danger signal that the firm is using excessive debt and does not have the ability to offer assured payment of interest to the creditors.

**Dividend Coverage Ratio:** It measures the ability of a firm to pay dividend on preference shares which carry a stated rate of return. This ratio is the ratio (expressed as x number of times) of net profits after taxes (EAT) and the amount of preference dividend. Thus,

$$\text{Dividend coverage} = \frac{\text{EAT}}{\text{Preference dividend}}$$

**Total Coverage Ratio** While the interest coverage and preference dividend coverage ratios consider the fixed obligations of a firm to the respective suppliers of funds, that is, creditors and preference shareholders, the total coverage ratio has a wider scope and takes into account all the fixed obligations of a firm, that is, (i) interest on loan, (ii) preference dividend, (iii) lease payments, and (iv) repayment of principal. Symbolically,

$$\text{Total coverage} = \frac{\text{EBIT} + \text{Lease payment}}{\text{Interest} + \text{Lease payments} + (\text{Preference dividend} + \text{Instalment of principal})/(1-t)}$$

**Earnings Per Share (EPS)** measures the profit available to the equity shareholders on a per share basis, that is, the amount that they may get on every share held. It is calculated by dividing the profits available to the shareholders by the number of the outstanding shares. The profits available to the ordinary shareholders are represented by net profits after taxes and preference dividend. Thus,

$$\text{EPS} = \frac{\text{Net profit available to equity holders}}{\text{Number of ordinary shares outstanding}}$$

**Dividend Per Share (DPS)** is the dividends paid to the shareholders on a per share basis. In other words, DPS is the net distributed profit belonging to the shareholders divided by the number of ordinary shares outstanding. That is,

$$\text{DPS} = \frac{\text{Dividend paid to ordinary shareholders}}{\text{Number of ordinary shares outstanding}}$$

**Dividend-Pay Out (D/P) Ratio** is also known as pay-out ratio. It measures the relationship between the earnings belonging to the ordinary shareholders and the dividend paid to them. In other words, the D/P ratio shows what percentage share of the net profits after taxes and preference dividend is paid out as dividend to the equity holders. It may be calculated by dividing the total dividend paid to the owners by the total profits/earnings available to them. Alternatively, it may be found out by dividing the DPS by the EPS. Thus,

$$1. D/P = \frac{\text{Total dividend (cash dividend) to equityholders}}{\text{Total net profit belonging to equityholders}} \times 100$$

$$2. D/P = \frac{\text{Dividend per ordinary share (DPS)}}{\text{Earnings per share (EPS)}} \times 100$$

**Earnings and Dividend Yield** is closely related to the EPS and DPS. While the EPS and DPS are based on the book value per share, the yield is expressed in terms of the market value per share. The earnings yield may be defined as the ratio of earnings per share to the market value per ordinary share. Similarly, the dividend yield is calculated by dividing the cash dividends per share by the market value per share. That is,

$$1. \text{Earning yield} = \frac{\text{EPS}}{\text{Market value per share}} \times 100$$

$$2. \text{Dividend yield} = \frac{\text{DPS}}{\text{Market value per share}} \times 100$$

The earning yield is also called the earning-price ratio.

**Price Earnings (P/E) Ratio** is closely related to the earnings yield/earnings price ratio. It is actually the reciprocal of the latter. This ratio is computed by dividing the market price of the shares by the EPS. Thus,

$$P/E \text{ ratio} = \frac{\text{Market price of share}}{\text{EPS}}$$

## 5.8 Utility Of Ratio Analysis

Ratio analysis is useful or the beneficial to various class of the people like shareholders, management, creditors etc. Their uses for the ratio may be different. So, wide variety of ratios can be used for the uses of various class of people. The ratio analysis provides useful data to the management, which would help them in taking important policy decisions. Ratio analysis helps in inter-firm comparison,

which shows the strength and weakness of the firm as compared to other firms and will indicate corrective measures. The ratios of the last three to five years will indicate the trend in the respective fields. Ratios guide the management in making some of the important decisions. Useful information about the trend of profitability is available from profitability ratios. In fact, the use of ratios was made initially to ascertain the liquidity of business. The use of ratios was started by banks for ascertaining the liquidity and profitability of body corporate' business for the purpose of advancing loans to them. It gradually became popular and other creditors began to use them profitably. Now even the investors calculate ratios from the published accounts of the body corporate in order to have an idea about the solvency and profitability of the body corporate before investing their savings.

### **Limitations Of Ratio Analysis**

Even though there are various benefits available to variety of people from various ratios it has some limitations. Followings are some of the limitations of the ratios:

There is practically no standard ratio against which the actual performance can be compared. The satisfactory level of various ratios may differ from one industry to another only because circumstances differ from industry to industry and even from firm to firm. While comparing ratios of different firms, it must be remembered that different firms follow different accountancy plans and policies. Hence, great care has to be exercised before any conclusions are drawn from such comparison. If the accounting data is not accurate, the accounting ratios based on these figures would give misleading results. The utility of ratios computed from the financial statements of one year only is obviously limited.

### **5.10 Rearrangement Of Financial Statements**

Normally, financial statements like profit and loss account or balance sheet are prepared horizontally means in a T-shaped form. But it is advisable to prepare or arrange the financial data in vertical form to find various ratios. The T-shaped financial statements must be rearranged in the proper form which would give ready figures for calculating different ratios. The following are the specimen of such forms.

#### **Profit And Loss Account**

	Net Sales (Sales Less : Sales Return)	Rs.	Rs.
<i>Less</i>	Cost of Sales :		
	Opening Stock		
	+ Purchases		
	+ Purchase expenses		
	<i>Less</i> : Closing Stock		
		Gross Profit:	
<i>Less</i>	Operating Expenses :		
	Administration Expenses		

	<b>Selling Expenses</b>		
	<b>Financial Expenses</b>		
	<b>Net Profit :</b>	.....	

Balance-Sheet

	Funds Employed		Rs.	Rs.
(1)	Shareholder's Funds:			
	Equity Share Capital			
	Preference Share Capital			
	Reserve and Surplus			
(2)	Loan Funds (Long-term Funds) :			
	1. Debentures			
	2. Financial Institution's Loan	Capital Employed :		
	Application of Funds (Employment of Capital) . .			
(1)	Fixed Assets less Depreciation			
(2)	Investments			
(3)	Current Assets. Loans and Advances :			
	(i) Stock '			
	(ii) Debtors			
	(iii) Cash and Bank			
<i>Less</i>	<i>: Current Liabilities :</i>			
	(i) Creditors			
	(ii) Bills Payable			
	Net Current Assets	Total Assets	....	....

### 5.11 Exercise

1. Explain the concept and need of ratio analysis?
2. Explain various revenue ratios?
3. Explain various types of Balance Sheet ratios?
4. Write a note about various composite ratios?
5. Write about the usefulness and limitations of ratio analysis?

### 5.11 Practical

1. Parth Ltd. has made a profit of Rs. 9,75,000 after charging depreciation of Rs. 5,00,000 and providing for tax. The sum of interest and other sums written off are Rs. 32,120.

The details about loans are as follows :

- 15% Debentures of Rs. 10,00,000 of which 1/4th is payable during the current year.

18% Term Loan of Rs. 4,00,000 of which 1/4 is payable at the end of the current year.

16% Cash Credit Rs. 5,00,000.

18% Loan from private parties Rs. 2,00,000 which is payable in full during the current year.

Compute the Debt Service Coverage Ratio.

**Solution :**

(I)	Payment of Interest :	Rs.
	(1) 15% Debentures of Rs. 10 lakhs	1,50,000
	(2) 18% Term Loan of Rs. 4 lakhs	72,000
	(3) 16% Cash Credit of Rs. 5 lakhs	80,000
	(4) 18% Loan of Rs. 2 lakhs from private parties	36,000
	Total	3,38,000
(II)	Payment of Principal :	Rs.
	(1) 15% Debentures of Rs. 10 lakhs $\times 1/4$	2,50,000
	(2) 18% Term loan of Rs. 4 lakhs $\times 1/4$	1,00,000
	(3) 18% Private loan of Rs. 2 lakhs =	2,00,000
		5,50,000
(III)	Profit available for Payment of Debt :	Rs.
	Net Profit	9,75,000
	+ Depreciation	5,00,000
	+ Other Non-cash items written	32,120
	+ Interest which is payable	3,38,000
	(It is added because it is already deducted from profit as the profit given is after tax)	
		18,45,120
		0

$$\text{Debt Service Coverage Ratio} = \frac{\text{Profit}}{\text{Principal} + \text{Interest}}$$

$$= \frac{18,45,120}{3,38,000 + 5,50,000} \\ = 2.078$$

The ratio shows that from the sum of profit debt (Principal + Interest) can be paid 1.74 times i.e. profit is sufficient for payment of debt.

2. The following are the summarized balance sheets of Rehan Ltd. for two years. You are required to rearrange it in the form suitable for computing ratios :

Balance Sheets

Liabilities	1997 Rs.	1998 Rs.	Assets	1997 Rs.	1998 Rs.
Share Capital :			Fixed Assets		
Equity shares of			Less : Depreciation	3,50,000	4,90,000
Rs. 100 each	1,00,000	1,50,000	Current Assets :		
8% Pref. Shares			Stock	1,60,000	60,000
of Rs. 100 each	50,000	50,000	Debtors	40,000	35,000
Reserves	2,00,000	1,50,000	Cash	10,000	5,000
6% Debentures	1,00,000	1,00,000			
Current Liabilities	90,000	1,20,000			
Bank Overdraft	20,000	20,000			
	5,60,000	5,90,000		5,60,000	5,90,000

From the above information you are required to calculate the following ratios and comment on the financial position of body corporate.

(1) Current Ratio (2) Liquid Ratio (3) Acid-Test Ratio (4) Proprietary Ratio (5) Long term Funds to Fixed Assets Ratio.

**Solution:**

In the absence of any figures relating to Profit and Loss Account, the comments would be based on Balance Sheet ratios only.

First of all we shall prepare a vertical balance sheet which is useful for computing various ratios.

		Previous year's Figures	Current Figures
		1997	1998
	Funds Employed	Rs.	. Rs.
(1)	Shareholder's Funds :		
	(A) Equity shares of Rs. 100 each	1,00,000	1,50,000
	8% Pref. shares of Rs. 100 each	50,000	50,000
	(B) Reserves and Surplus	2,00,000	1,50,000
		3,50,000	3,50,000
(2)	Loan Funds :		
	Secured Loan : 6% Debentures	1,00,000	1,00,000
		4,50,000	4,50,000
	Application of Funds		
(1)	Fixed Assets :		
	Total Fixed Assets Less Depreciation (a)	3,50,000	4,90,000
(2)	Investments		
(3)	Current Assets, Loans and Advances :		
	(1) Stock	1,60,000	60,000
	(2) Debtors	40,000	35,000
	(3) Cash	10,000	5,000
		2,10,000	1,00,000
Less	Current Liabilities and Provisions :		
	(1) Current Liabilities	90,000	1,20,000
	(2) Bank Overdraft	20,000	20,000
		1,10,000	1,40,000
	Net Current Assets (Working Capital) (b)	1,00,000	40,000
	Total Assets (a) + -(b)	4,50,000	4,50,000

(1) Current ratio = Current Assets / Current Liabilities

For 1997 = 2,10,000/1,10,000 = 1.91:1

For 1998 = 1,00,000/1,40,000 = 0.71 : 1

Current ratio indicates the working capital position. There has been considerable deterioration in the current ratio. On one hand, current assets have

been reduced to almost half of what they were last year, whereas the current liabilities have increased by nearly 40%. Normally, this ratio should be 2:1. i.e. the value of current assets should be twice the current liabilities. The standard had been met last year, whereas the ratio during the current year should cause anxiety. Current assets are less than current liabilities, meaning thereby that the body corporate would not be able to meet its current obligations as and when they will fall due. If immediate steps are not taken to remedy the situation, the body corporate will be put to considerable trouble.

**(2) Liquid Ratio** = Liquid Assets/Liquid Liabilities

Where Liquid Assets = Current Assets - Stock

and Liquid Liabilities = Liquid Assets - Bank overdraft

For 1997 =  $50,000/90,000$  = 0.55:1

For 1998 =  $40,000/1,20,000$  = 0.33:1

The liquid ratio is a better indication of liquid position of the body corporate and shows whether the body corporate will be able to meet its current obligations due for immediate payment at a short notice. No standard norm is available for this ratio. However, it is supposed that liquid assets should at least cover the liquid liabilities i.e. the ratio should be 1 : 1. The ratio for this body corporate during 1997 was unsatisfactory and has deteriorated to such an extent during 1998, that the body corporate would be facing financial crisis, if immediate corrective steps are not taken to improve this situation. It may be suggested that the body corporate should issue either shares or debentures to improve its liquid position.

**(3) Acid-Test Ratio** = Quick Assets/Liquid Liabilities

Here Quick Assets = Cash + Bank + Easily marketable securities. 10,000

For 1997 =  $10,000/90,000$  = 0.11:1

For 1998 =  $5,000/1,20,000$  = 0.042:1

This ratio indicates a danger signal. It suggests that immediate steps should be taken to increase quick assets.

**(4) Proprietary Ratio** = Proprietary Funds  $\times 100$

Total Assets

For 1997 = 3,50,000  $\times 100$

5,50,000

= 63.64 %

For 1998 = 3,50,000  $\times 100$

$$\begin{aligned} & 5,90,000 \\ & = 59.32 \% \end{aligned}$$

The ratio indicates the sum of capital contributed by the proprietors. The higher the ratio, the stronger is the financial position of business. The ratio during 1997 shows a comfortable position which has gone down in 1998 showing a deteriorating financial position. The proprietor's funds have remained stationary (increase in share capital Rs. 50,000 is rewarded by decrease in Reserves of Rs. 50,000) during these two years against which total assets have increased by nearly Rs. 40,000. Such a declining trend must be arrested as the existing position is not satisfactory.

#### (5) Long Term Funds to Fixed Assets Ratio

$$= \frac{\text{Long Term Funds} \times 100}{\text{Fixed Assets}}$$

(Long Term Funds = Share Capital + Reserves + Long Term Liabilities)

$$\begin{aligned} \text{For 1997} & = \frac{4,50,000 \times 100}{3,50,000} = 128.57 \% \end{aligned}$$

$$\begin{aligned} \text{For 1998} & = \frac{4,50,000 \times 100}{4,90,000} = 91.84 \% \end{aligned}$$

The fixed assets should always be acquired out of long term funds meaning thereby that this ratio should not be less than 100. The ratio for this body corporate during 1997 indicated a reasonable position, as the fixed capital was more than adequate to cover the fixed assets. The circumstances in 1998 is however, not comfortable as the ratio has not only deteriorated but has even gone down below 100 suggesting that the body corporate has financed its purchases of fixed assets out of the short term finances which is a dangerous financial policy. The body corporate will not be able to repay its short term liabilities, sunk in fixed assets and may be forced to dispose of some of its fixed assets to repay these short term liabilities. The better course for the body corporate is to issue either shares or debentures or to obtain long term finances to acquire fixed assets.

The over-all financial position of the body corporate is not satisfactory and shows a considerable deterioration from its position of the previous year.

3. From the following statements of Smita Ltd. for the year ending 31st March, 2002, you are required to rearrange the items in the form of Financial Statements suitable for analysis and calculate the following ratios and state the significance of each such ratio :

- (1) Current ratio
- (2) Acid-test ratio (Liquid ratio)
- (3) Operating ratio

(4) Stock turnover ratio

(5) Debtors' Ratio and Debtors' Turnover

Balance Sheet as on 31-3-2002

Liabilities	Rs.	Assets	Rs.
Share Capital :		Land and Buildings	50,000
Issued and Paid up :		Plant and Machinery	20,000
50,000 Equity Shares of		Stock	15,000
Re. 1 each	50,000	Debtors	25,000
General Reserve	40,000	Cash	15,000
Profit & Loss A/c	15,000		
Sundry Creditors	20,000		
	1,25,000		1,25,000

Profit and Loss Account for the year ending 31-3-2002

	Rs.		Rs.
To Opening Stock	25,000	By Sales	1,80,000
“ Purchases	1,05,000	“ Closing Stock	15,000
“ Gross Profit-c/d	65,000		
	1,95,000		1,95,000
To Advertisement expenses	23,000	By Gross Profit-b/d	65,000
Selling expenses	8,000	“ Profit on sale of	
“ Finance expenses	4,000	fixed assets	5,000
“ Net Profit	35,000		
	70,000		70,000

### Solution

The given balance sheet" and profit and loss account will be rearranged as below:

Balance Sheet as on 31-3-2002

Sources of Funds		Rs.	Rs.
Share Capital		50,000	
General Reserve		40,000	
Profit and Loss Account .		15,000	
Shareholders' Funds :			1,05,000
Application of Funds			
Fixed Assets :			
Land and Buildings		50,000	
Plant and machinery		20,000	70,000
Current Assets :			
Stock	15,000		
Debtors	25,000		
Cash	15,000	55,000	
<i>Less : Current Liabilities :</i>			
Sundry Creditors		20,000	
Net Current Assets :			35,000
			1,05,000

Profit and Loss Account for the year ending 31-3-2002

	Rs.	Rs.
Sales		1,80,000
<i>Less : Cost of Sales :</i>		
Opening Stock	25,000	
Add : Purchases	1,05,000	
	30,000	
<i>Less : Closing Stock</i>	15,000	1,15,000
Gross Profit :		65,000
<i>Less : Operating Expenses :</i>		
Administration expenses	23,000	
Selling Expenses	8,000	
Finance Expenses	4,000	35,000
Operating Net Profit :		30,000
<i>Add : Profit on Sale of Fixed Assets</i>		5,000
<i>Net Profit :</i>		35,000

Let us now examine the ratios :

$$\begin{aligned}(1) \text{ Current Ratio} &= \text{Current Assets} / \text{Current Liabilities} \\ &= 55,000 / 20,000 = 2.75:1\end{aligned}$$

The standard for current ratio is 2 : 1, whereas the same for this body corporate is 2.75 : 1 signifying that for every Re. 1 of current liabilities the body corporate is having Rs. 2.75 worth of current assets. The state of affairs is quite relaxed and looking to the fact that current assets mostly comprise liquid assets, it can be said that the body corporate will be able to meet its current liabilities with ease, as and when they arise.

$$(2) \text{ Acid-Test or Liquid Ratio} = \text{Liquid Liabilities} / \text{Liquid Assets}$$

Note that the two ratios, liquid ratio and acid test ratio are used here to mean the same ratio.

$$\begin{aligned}\text{Acid-Test Ratio} &= 40,000 / 20,000 \\ &= 2:1\end{aligned}$$

This ratio indicates the ability of the body corporate to meet its current obligations without delay. The standard may be taken as 1 : 1, whereas in the case of this body corporate the ratio is as high as 2 : 1. Hence, the body corporate would be very easily meeting its short term obligations as and when they fall due.

$$(3) \text{ Operating Ratio} = (\text{Cost of goods sold} + \text{Operating Exp}) \times 100$$

$$\begin{aligned}&\text{Sales} \\ &= \frac{1,15,000 + 35,000}{1,80,000} \times 100 \\ &= 83.33\%\end{aligned}$$

This calculation shows that for sale of every Rs. 100, the operating expenses take up Rs. 83.33 leaving Rs. 16.67 as net profits for the proprietors. It signifies the efficiency of management. It is difficult to comment on the efficiency with which the business is managed only from this figure of 83.33%. Comparison with the figures of other units in the same business and also with the past figures of the same body corporate is required before any opinion can be given.

$$(4) \text{ Stock Turnover} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\begin{aligned}&1,15,000 / 20,000 = 5.75\end{aligned}$$

$$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$\begin{aligned}&= \frac{25,000 + 15,000}{2} \\ &= \text{Rs. } 20,000\end{aligned}$$

This ratio indicates the speed with which the stock is turned over. The greater this ratio, the more efficient is the management of sales. In this particular

case, the stock is turned over 5.75 times during the year or in other words the average stock is sold out within 9 weeks ( $52 \div 5.75$ ). This may be treated as satisfactory turnover.

However, final opinion can be formed only after comparing this figure with those of other body corporate's in the same business.

$$(5) \text{Debtors Ratio} = \text{Debtors} + \text{Bills Receivable} / \text{Average daily sales}$$

$$= 25,000 / 500 = 50 \text{ days}$$

$$(\text{Average daily sales} = 1,80,000 / 360 = \text{Rs. 500})$$

Note : It is interesting to note that in order to arrive at the figure of daily sales, it is a common practice to divide the annual sales by 365. However some suggest that it should better be divided by 360. If working days only are taken into account, then the total sales must be divided by 300 exclusive of non-working Sundays and holidays from 365. Alternative Technique :

$$\text{Debtors Ratio} = \frac{\text{Debtors} + \text{Bills Receivable}}{\text{Credit Sales}}$$

Credit Sales

$$= 25,000 / 1,80,000 \times 360 = 50 \text{ days}$$

$$\text{Debtors Turnover} = 1,80,000 / 25,000 = 7.2$$

$$\text{Debtors Ratio} = 360 \text{ days} / 7.2 = 50 \text{ days}$$

As opening debtors are not given, we have taken closing debtors instead of average debtors

The debtors ratio or the average collection period indicates the efficiency or otherwise of the collection department. It is difficult to give any judgment from the simple figure of 50 days, unless the average collection period of the whole industry is given. If 30 days is taken to be the average collection period, then this figure of 50 days shows an unsatisfactory credit and collection policy.

4. The following is the Balance Sheet of Prithvi Ltd. as on 31-3-2003. Rearrange it in a form suitable for analysis and Calculate the following ratios :

(1) Net Profit Ratio (2) Current Ratio (3) Proprietary Ratio (4) Return of capital Employed (5) Debtors Ratio (6) Fixed-assets Turnover.

Balance Sheet as on 31-3-2003

	Rs.		Rs.
Creditors	16,000	Cash at Bank	26,000
Bills Payable	6,000	Debtors	11,000
Debentures	1,00,000	Stock	50,000
Reserves and Profits	69,000	Bills Receivable	4,000

Paid up Capital	<u>1,00,000</u> 2,91,000	Fixed- As sets	<u>2,00,000</u> 2,91,000
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Sales : 2,00,000; Net Profits Rs. 60,000.

**Solution :**

Balance Sheet as on 31-3-2003

Sources of Funds		Rs.
Share Capital		1,00,000
Reserves and Profits	Shareholders' Funds :	69,000
		1,69,000
Debentures	Capital Employed :	1,00,000
Application of Funds		2,69,000
Fixed Assets		
Current Assets :		2,00,000
Debtors	11,000	
Stock	50,000	
Cash at Bank	26,000	
Bills Receivable	4,000	
	91,000	
Less : Current Liabilities :		
Creditors	16,000	
Bills Payable	6,000	22,000
	Net Current Assets :	69,000
		2,69,000

Various ratios useful for financial analysis are as follows :

**(1) Net Profit Ratio** = Net Profit / sales  $\times 100$

$$= 60,000 / 2,00,000 \times 100 = 30\%$$

It is difficult to give opinion about the profitability of business only on the basis of single year's ratio. The information about the nature of business, the figures relating to other firms and the statistics for the past few years of the body corporate are required for comparison purposes. However, 30% net profit on sales seems to be reasonable in case of normal business.

**(2) Current Ratio** = Current Assets/ Current Liabilities =  $91,000 / 22,000 = 4.14:1$

The current assets cover current liabilities four times, which shows a highly comfortable liquid position.

**(3) Proprietary Ratio** = Proprietors' Funds / Total Assets = 1,69,00/2,91,00 = 58.08

The ratio seems to be unsatisfactory. Normally the proprietors should provide at least sufficient funds to cover the fixed assets from which the revenue of the enterprise will be derived. The faster the percentage is to 100, the better the financial strength.

**(4) Return on Capital Employed** = Net Profit / Capital Employed  $\times 100$

$$= \frac{\text{Net Profits}}{\text{Share Capital} + \text{Reserves} + \text{Debentures}} \times 100$$

$$= \frac{60,000}{1,00,000 + 69,000 + 1,00,000} \times 100$$

$$= 22.30 \%$$

It is difficult to opine about the reasonableness or otherwise of this return in the absence of details regarding these figures of other body corporates and past figures of the same business. However, normally this return may be treated as satisfactory.

**(5) Debtors Ratio** = Debtors + Bills Receivable

Average daily sales

Average daily sales = 2,00,000 / 365 = Rs. 548

Debtors Ratio = 11,000 + 4,000 15,000 = 27 days  
548

The average period of credit is 27 days or the collection period of credit sales is 27 days. Whether this credit period is excessive or reasonable can be said only when the information regarding credit period of other concerns in the same business is available.

**Debtors Turnover** = Credit Sales/ Average Debtors = 20,00,000/15,000 = 13.3

Debtors Ratio = 365/ 13.3 = 27 days

**(6) Fixed Assets-Sales Ratio** = Sales / Fixed Assets = 20,00,00/1,00,000 = 1.1

This ratio suggests the efficiency of management. If the proportion of sales to investment in fixed assets is more, it suggests that the fixed assets are utilized more efficiently in business. However, no view can be given on the basis of 1 : 1 ratio unless it is compared with other firms in the same business.

5. The information given below is taken from the financial records of two Body corporates engaged in the same industry. From the following information find

following ratios for the year ending 2004.

	Riddhi Ltd.	Siddhi Ltd.
	Rs.	Rs.
Total Sales (out of which 20% are cash sales)	6,40,000	6,40,000
Cost of goods sold	4,48,000	4,16,000
Net Profit (After 50% revenue tax)	32,000	51,200
Equity Share Capital	3,00,000	2,60,000
Retained earnings	49,600	1,32,400
15% Debentures	1,60,000	1,32,000
Sundry Creditors	70,000	1,00,000
Bank Overdraft	18,000	40,000
Fixed Assets	3,20,000	3,10,000
Stock	64,000	1,60,000
Debtors	80,000	72,000
Cash	32,000	20,000
Preliminary expenses	1,600	2,400

From the above information, calculate the following accounting ratios for the both body corporates and make brief comment on each of them,

- (i) Current Ratio
- (ii) Debtors' Ratio (360 days to be taken for the year)
- (iii) Operating Ratio.
- (iv) Rate of return on shareholders' funds
- (v) Rate of return on total capital employed.

### Solution

(1) Current Ratio = Current Assets /Current Liabilities

Current Assets :	Riddhi Ltd.	Siddhi Ltd.
	Rs.	Rs.
Stock	64,000	1,60,000
Debtors	80,000	72,000
Cash	32,000	20,000
	1,76,000	2,52,000

Current Liabilities :		
Sundry Creditors .	70,000	1,00,000
Bank Overdraft	18,000	40,000
	88,000	1,40,000

$$\text{Riddhi Ltd.} = 1,76,000 / 88,000 = 2.1 : 1$$

$$\text{Siddhi Ltd.} = 2,52,000 / 1,40,000 = 1.8:1$$

**Comment :** Generally ratio of 2 indicates a good liquid position. From that viewpoint the liquid position of Riddhi Ltd. is better than that of Siddhi Ltd.

**(2) Operating Ratio** = Cost of goods sold + Operating Expenses/ Total Sales  $\times 100$

	Riddhi Ltd.		Siddhi Ltd.
	Rs.		Rs.
Total Sales	6,40,000		6,40,000
Less : Cost of goods sold	4,48,000		4,16,000
Gross Profit	1,92,000		2,24,000
Less : Net Profit			
After 50% revenue-tax	32,000	51,200	
+ 50% tax	32,000	64,000	51,200
Operating Expenses		1,28,000	1,21,600

$$\text{Riddhi Ltd.} = (4,48,000 + 1,28,000) / 6,40,000 \times 100 = 90\%$$

$$\text{Siddhi Ltd.} = (4,16,000 + 1,21,600) / 6,40,000 \times 100 = 84\%$$

**Comment :** From the total revenue of sales, total expenses of Riddhi Ltd. 90% and Siddhi Ltd. 84% will be deducted showing net profit of 10% and 16% respectively. Thus management of Siddhi Ltd. is more efficient.

**(3) Debtors Ratio** = ((Debtors + Bills Receivable)/ Credit Sales)  $\times$  No. of days of year

$$\begin{aligned} \text{Riddhi Ltd.} &= (80,000 / 5,12,000) \times 360 \\ &= 56.25 \text{ days} \end{aligned}$$

$$\begin{aligned} \text{Siddhi Ltd.} &= (72,000 / 5,12,000) \times 360 \\ &= 50.625 \text{ days} \end{aligned}$$

**Comment :** The collection of credit sales is better and speedy in case of Siddhi Ltd. hence, its working capital position will be better, because it is able to collect its dues earlier.

**(4) Rate of Return on Shareholders' Funds :**

$$= ((\text{Net Profit (After Interest and tax)}) / \text{Shareholders' Funds}) \times 100$$

Shareholders Funds :		
	Riddhi Ltd.	Siddhi Ltd.
Equity Share Capital	Rs. 3,00,000	Rs. 2,60,000
Retained earnings	49,600	1,32,400
	3,49,600	3,92,400
Less : Preliminary Expenses	1,600	2,400
	3,48,000	3,90,000

$$\text{Riddhi Ltd.} = (32,000 / 3,48,000) \times 100$$

$$= 9.195 \%$$

$$\text{Siddhi Ltd.} = (51,200 / 3,90,000) \times 100$$

$$= 13.128 \%$$

Comment : The return on shareholders funds of Siddhi Ltd. is higher as compared to Riddhi Ltd. and so investors would be tempted to invest in Siddhi Ltd. Thus this ratio gives guidance to investors.

**(5) Return on total capital employed :**

$$= (\text{Net Profit (Before Interest and Tax)} / \text{Capital Employed}) \times 100$$

	Riddhi Ltd.	Siddhi Ltd.
	Rs.	Rs.
Net Profit (After 50% revenue tax)	32,000	51,200
+ Tax	32,000	51,200
+ Debenture Interest	24,000	19,800
Net Profit before Interest & Taxes	88,000	1,22,200
	A Co.	B Co.
Capital Employed :		
Equity share capital	3,00,000	2,60,000
+ Retained Earnings	49,600	1,32,400
+ Debentures	1,60,000	1,32,000
	5,09,600	5,24,400
Less : Preliminary Expenses	1,600	2,400
	5,08,000	5,22,000

$$\text{Riddhi Ltd.} = (88,000 / 5,08,000) \times 100$$

= 17.32 %

$$\text{Siddhi Ltd.} = (1,22,200/5,22,000) \times 100 \\ = 23.41 \%$$

Comment : The rate of return on capital employed in Siddhi Ltd. is much higher and so its profitability is much better than that of Riddhi Ltd.

**6:** The financial statements of XYZ Ltd. for the past two years are summarized below :

As on	31-3-19X6 Rs.	31-3-19X7 Rs.
<b>Assets :</b>		
Cash	-	1,500
Debtors .	55,000	40,000
Stock-in-trade	55,000	45,000
Prepaid expenses	300	500
Loan to a director payable in 2002	----	5,000
Plant at cost less depreciation	61,700	65,000
Land and building at cost less depreciation	75,000	75,000
<b>Rs.</b>	<b>2,47,000</b>	<b>2,32,000</b>
<b>Liabilities :</b> -		
Creditors	32,000	25,000
Provision for taxation	11,000	9,000
Bank overdraft	12,000	
Paid up capital	1,50,000	1,50,000
General reserve	30,000	30,000
Profit and loss -account	12,000	18,000
<b>Rs.</b>	<b>2,47,000</b>	<b>2,32,000</b>

(a) You are required to :

(i) Calculate current ratio; liquid ratio; proprietary ratio and stock-working capital ratio and comment thereon. Solution :

As on	31-3-19X6 Rs.	31-3-19X7 Rs.
<b>Current assets :</b>		
Cash	-	1,500
Debtors	55,000	40,000
Stock-in-trade	55,000	45,000
Prepaid expenses	300	500

	Rs.	1,10,300	87,000
<b>Less : Current liabilities :</b>			
Creditors		32,000	25,000
Provision for taxation		11,000	9,000
Bank overdraft		12,000	-
	Rs.	<u>55,000</u>	34,000
Working capital		<u>55,300</u>	<u>53,000</u>
<b>Current ratio =</b>			
i.e. Current assets =		1,10,300	87,000
Current liabilities	Rs.	55,000	34,000
	=	2,01 : 1	2.56 : 1

**Comment:**

Though the working capital position has considerably improved, in absolute terms the working capital has gone down by Rs. 2,300. The bank overdraft has been turned into favourable cash balance. Debtors and stock, both have reduced, resulting in the reduction of creditors as well.

However, this seems to be result of the contraction in business activities, which is evident from the facts (i) stocks have reduced, (ii) debtors have reduced and (iii) creditors have also reduced, (iv) there is no more a need for bank overdraft and (v) assuming that the provision for taxation is based on current year's profits, the profit has also gone down.

		Year ending 31-3-X6	31-3-X6
Liquid ratio = Quick assets / Quick liabilities			
Quick assets = Current assets	=	1,10,300	87,000
Less: Stock and prepaid expenses		<u>-55,300</u>	<u>-45,500</u>
	(i)	<u>55,000</u>	41,500
Quick liabilities = Current liabilities		55,000	34,000
Less Bank overdraft		-12,000	-NIL
	(ii)	= 43,000	34,000
Liquid ratio	(i) / (ii)	= 1.28 : 1	1.22: 1

**Comments:**

Thus, though the current ratio has improved, the liquid ratio has slightly deteriorated. This is due to the repayment of the bank overdraft, which might have been done before due date to contract the business activity.

	31-3-X6 Rs.	31-3-X7 Rs.
Proprietors' funds :		
Paid up capital	1,50,000	1,50,000
General reserve	30,000	30,000
Profit and loss account	12,000	18,000
	Rs. 1.92,000	1.98,000
Total assets		
Fixed and long term assets	1,36,700	1,45,000
Current assets	1.10.300	87,000
	Rs. 2.47,000	2.32,000

$$\begin{aligned}
 \text{Proprietary ratio} &= \text{Proprietors' funds} / \text{Total assets} \\
 &= 1,92,000 / 2,47,000 & 1,98,000 / 2,32,000 \\
 &= 0.78 : 1 & 0.85 : 1 \\
 \text{or.....} & 78\% & 85\%
 \end{aligned}$$

Stock-working capital ratio = Stock / Working capital

$$\begin{array}{ll}
 \text{31-3-X6} & \text{31-3-X7} \\
 \underline{55,000} & \underline{45,000} \\
 55,300 & 53,000 \\
 = 0.99:1 & 0.85:1 \\
 \text{i.e. 99\%} & 85\%
 \end{array}$$

7: The following is the Balance sheet of Semi-Liquid Limited as on 31st March, 19X8.

Liabilities	RS.	Assets	Rs.
Share capital		Land and buildings	1,20,000
1000 Equity shares of		Plant and machinery	1,60,000
Rs. 100 each	1,00,000	Goodwill	1,20,000
1,000 9% Preference shares of		Investments (marketable)	20,000
Rs. 100 each	1,00,000	Debtors	60,000
General reserve	40,000	Stock	60,000
Profit and loss account	60,000	Cash on hand	60,000
8% Mortgage loan	1,60,000		
Sundry creditors	70,000		
Bank overdraft	20,000		
Provision for taxation	50,000		
	6,00,000		6,00,000

Compute the balance sheet ratios and comment on the liquidity, solvency and capital structure of the body corporate.

**Solution :**

We have to prepare the balance sheet in vertical form.

Semi Liquid Ltd. Balance Sheet as on 31st March, 19X8.

	Rs.	Rs.	Rs.
<b>Total funds employed :</b>			
I. Proprietary funds :-			
Equity share capital		1,00,000	
9% Preference share capital		1,00,000	
General reserve		40,000	
Profit and loss account		<u>60,000</u>	
			3,00,000
<b>II. Long term liabilities :</b>			
8% Mortgage loan			<u>1,60,000</u>
		Rs.	<u>4,60,000</u>
<b>Employee! as under :</b>			
I. Fixed assets :			
Goodwill		1,20,000	
Land and buildings		1,20,000	
Plant and machinery		<u>1,60,000</u>	
			4,00,000
<b>II. Working capital ;</b>			
<b>Current assets :</b>			
Investments	20,000		
Debtors	60,000		
Stock	60,000		
Cash	<u>60,000</u>		
		2,00,000	
<b>Less : Current liabilities :</b>			
Creditors	70,000		
Bank overdraft	20,000		
Provision for taxation	<u>50,000</u>		
		1,40,000	
			60,000
		Rs.	<u>4,60,000</u>

Ratio:

$$\begin{aligned}
 \text{(i) Current ratio} &= \text{Current assets} / \text{Current liabilities} \\
 &= 2,00,000 + 1,40,000 = 1.43:1
 \end{aligned}$$

$$\begin{aligned}
 \text{(ii) Liquid ratio} &= \text{Current assets} - \text{Stock and prepaid expenses} / \text{Current liabilities} \\
 &\quad - \text{Bank overdraft}
 \end{aligned}$$

$$\begin{aligned}
 &= 2,00,000-60,000 / 1,40,000-20,000, \\
 &= 1,40,000 / 1,20,000 \\
 &= 1.17:1
 \end{aligned}$$

$$\begin{aligned}
 \text{(iii) Proprietary ratio} &= \text{Proprietor's funds} / \text{Total assets} \\
 &= 3,00,000 / 6,00,000 \\
 &= 0.5 : 1 \text{ OR } 50\%
 \end{aligned}$$

OR Proprietors' funds / Total funds

$3,00,000 / 4,60,000$

$= 0.65 : 1$  OR  $65\%$

(iv) Stock-working capital ratio.

$= \text{Stock} / \text{working capital}$ .

$= 60,000 / 60,000$

$= 1:1 = 100\%$ .

(v) Capital gearing ratio =  $\text{Preference share capital} + 8\% \text{ Mortgage loan}$   
 $/ \text{Equity share capital} + \text{Reserves}$

$= 1,00,000 + 1,60,000$

$= 2,60,000$

$= 1.3 : 1$  OR  $130\%$

Comments :

The body corporate seems to be quite stable financially, as its proprietary ratio is 50%. It is also in a very comfortable position, so far as its liquidity is concerned.

The liquid ratio is well above 1:1. However, its working capital position cannot be considered very happy as it is only 1.43 : 1. The stock is equal to the working capital, which is not adverse. The body corporate is quite highly geared. The fixed interest/dividend bearing capital is 130% of its equity.

**8:** Following is the profit and loss account and balance sheet of Hind Ltd. Redraft them for the purposes of analysis.

**Profit and loss account**

Rs.			Rs.
Opening stock of finished goods	1,00,000	Sales	10,00,000
Opening stock of raw materials	50,000	Closing stock of raw materials	1,50,000
Purchase of raw materials	3,00,000	Closing stock of finished goods	
Direct wages	2,00,000	Profit on sale of shares	1,00,000
Manufacturing expenses	1,00,000		50,000
Administration expenses	60,000		
Selling and distribution exp.	50,000		
Loss on sale of plant	55,000		
Interest on debentures	10,000		
Net profit	3,75,000		
	13,00,000		<u>13,00,000</u>
		<b>Balance sheet</b>	
Liabilities	Rs.	Assets	Rs.
Share capital:		Fixed assets	2,50,000
Equity share capital	1,00,000	Stock of raw materials	1,50,000
Preference share capital	1,00,000	Stock of finished goods	1,00,000
Reserves	1,00,000	Sundry debtors	1,00,000
Debentures	2,00,000	Bank balance	50,000
Sundry creditors	1,00,000		
Bills payable	50,000		
	Rs. 6,50,000	Rs.	6,50,000

**Solution:**

**Revenue Statement (in vertical format)**

	Rs.	Rs.
<b>Sales</b>		<b>10,00,000</b>
<b>Less: Cost of sales:</b>		
Raw materials consumed (Opening stock + Purchases - Closing stock)	2,00,000	
Direct wages	2,00,000	
Manufacturing expenses	<u>1,00,000</u>	
Cost of production	5,00,000	
Add: Opening stock of finished goods	<u>1,00,000</u>	
	6,00,000	
Less: Closing stock of finished goods	<u>1,00,000</u>	
Cost of goods sold		<u>5,00,000</u>
<b>Gross profit</b>		<b>5,00,000</b>
<b>Less: Opening expenses:</b>		
Interest	10,000	
Administration -	60,000	
Selling and distribution expenses	<u>50,000</u>	<b>1,20,000</b>
<b>Net operating profit</b>		<b>3,80,000</b>
<b>Add: Non-trading revenue:</b>		
Profit on sale of shares		<b>50,000</b>
		4,30,000
<b>Less: Non-trading expenses or losses:</b>		
Loss on sale of plant		<b>55,000</b>
<b>Revenue before tax/after tax .</b>		<b>3,75,000</b>

Balance Sheet (vertical)

	Rs.	Rs.
Assets		
Fixed assets		2,50,000
Current assets:		
Bank balance	50,000	
Sundry debtors	1,00,000	
Stock of raw materials	1,50,000	
Stock of finished goods	4,00,000	
Less: Current liabilities:		
Sundry creditors	1,00,000	
Bills payable	50,000	
	1.50.000	
Working capital		2.50.000
Capital employed		5.00.000.

Funds employed:

	Rs.	Rs.
Proprietors' funds:		
Equity share capital	1,00,000	
Reserves	1,00,000	
Preference share capital	1.00.000	3,00,000
Loan funds:		
Debentures		2.00.000
		5.00,000

**9:** Below is the summarized Balance Sheet and Revenue statement of PQR for the year 19X0:

Revenue Statement for the year 19X0

	Rs.
Sales	8,00,000
Less: Cost of goods sold	<u>6,55,000</u>
Gross margin	1,45,000
Less: Administration and selling expenses	<u>30,000</u>
	1,15,000
Less: Interest	<u>22,500</u>
Net profit (before tax)	92,500
Taxation	<u>41,000</u>
Net profit (after tax)	<u>51,500</u>

Balance sheet as on 31-12-19X0

Liabilities	Rs.	Assets	Rs.
Equity share <sup>1</sup> capital		Net fixed assets	4,00,000
(of Rs. 10/- each)	2,00,000	Stock	2,00,000
Reserves	60,000	Debtors	87,500
14% Debentures	3,50,000	Marketable investments	37,500
Creditors	90,000	Cash	25,000
Bills payable	10,000		
Other liabilities	40,000		
Rs.	<u>7,50,000</u>	Rs.	<u>7,50,000</u>

Market price of the share is Rs. 30.

Calculate the various ratios to measure financial stability, financial management and profitability.

Also find (a) how many times the earnings does the body corporate's share quote? (b) what is the debt-service ratio?, assuming 20% of debentures are repayable, (c) debtors turnover ratios.

Solution:

**I. Financial Stability and Management Ratios**

**(a) Short term-stability**

Current ratio = Current assets / Current liabilities

$$\begin{aligned}
 &= 2,00,000 + 87,500 + 37,500 + 25,000 / 90,000 + 10,000 + 40,000 \\
 &= 3,50,000 / 1,40,000
 \end{aligned}$$

= 2.5 :1

(b) Long term stability

(i) Proprietor ratio = Proprietors' funds / Total assets  
= 2,00,000 + 60,000 / 7,50,000  
= 2,60,000 / 7,50,000  
= 0.35 : 1

(ii) Debt equity ratio = Long term debts / Shareholders funds

$$\begin{aligned} &= 150,000 / 2,60,000 \\ &= 1.35:1 \end{aligned}$$

OR

$$\begin{aligned} &\text{Long term debts / Shareholders funds + Long term debts} \\ &= 3,50,000 / 2,60,000 + 3,50,000 \\ &= 3,50,000 / 6,10,000 \\ &= 0.57:1 \end{aligned}$$

(c) Immediate solvency

Liquid ratio = Quick assets / Quick liabilities  
= 87,500 + 37,500 + 25,000 / 90,000 + 10,000 + 40,000  
= 1,50,000 / 1,40,000  
= 1.07:1

(d) Trading on equity

Capital gearing ratio = Capital entitled to fixed return / Capital not so entitled to fixed return  
$$\begin{aligned} &= 3,50,000 / 2,00,000 + 60,000 \\ &= 3,50,000 / 2,60,000 \\ &= 1.35:1 \end{aligned}$$

(e) Investment in stocks

Stock working capital ratio = Stock / Working capital  
$$\begin{aligned} &= 2,00,000 / 3,50,000 - 1,40,000 \\ &= 2,00,000 / 2,10,000 \\ &= 0.95:1 \end{aligned}$$

## II. Profitability Ratios

(a) Gross profit ratio = Gross margin / Net sales \* 100  
= 1,45,000 / 8,00,000 \* 100  
= 18.13%

(b) Operating ratio = Operating costs / Net sales \* 100

$$=6,55,000 + 30,000 + 22,500 / 8,00,000 * 100$$

$$=7,07,500 / 8,00,000 * 100$$

$$=88.44 \%$$

(c) Net profit ratio = Net profit (before tax) / Capital employed \* 100

$$= 92,500 / 8,00,000 * 100$$

$$= 11.56 \%$$

(d) Return on capital employed = Net profit (before tax) / Capital employed \*100

$$=92,500 / 6,10,000$$

$$=15.16 \%$$

(e) Return on proprietors funds =Net profit (after tax) / Proprietors' funds \* 100

$$=51,500 / 2,80,000 * 100 = 18.39\%$$

(f) Return on equity capital = Net profit (after tax) - Preference dividend / Equity share capital

$$= 51,500/2,00,000 * 100 = 25.75\%$$

(g) Earnings per share = Net profit (after tax) - Preference dividend / No. of equity shares

$$= (51500-0)/20000$$

$$= \text{Rs. } 2.575 \text{ per share.}$$

III. Price Earnings Ratio = Market Price / EPS

$$= \text{Rs. } 30 / 2.575$$

$$= 11.65 \text{ times.}$$

IV. Debt Service Ratio = Net profit (before tax) + Interest / Interest on loans + Annual debt installment

$$=92,500 + 22,500 / 22,500 + 70,000$$

$$= 1,15,000 / 92,500$$

$$=1.24 \text{ times}$$

V. Debtors' Turnover Ratio = Debtors / Average net credit sales \* 365

$$= 87,500 / 8,00,000 * 365$$

$$= 39.92 = 40 \text{ days appx.}$$

**10:** The balance sheet and the revenue statement of Apex Body corporate Ltd. are given hereunder:

Balance sheet as on 31st March, 19X8

Liabilities	Rs.	Assets	Rs.
Equity capital (Rs. 100 each)	1,20,000	Fixed assets	1,00,000
Retained earning	36,000	Prepaid expenses	1,000
6% Debentures	50,000	Inventory	40,000
Creditors	10,000	Debtors	70,000
Wages payable	3,000	Cash	11,000
Taxes	3,000		
	Rs. 2,22,000		Rs. 2,22,000

Revenue Statement for the year ended 31st March. 19X8

	Rs.	Rs.
Sales		4,00,000
Less: Opening stock	30,000	
Purchases	3,00,000	
	3,30,000	
Closing stock	40,000	
		2,50,000
Gross profit		1,10,000
Less: Operating expenses		80,000
Operating net profit		30,000
Less: Revenue tax		12,000
Net profit after tax		18,000

Using these statements, compute:

(i) Current ratio, (ii) Acid test ratio, (iii) Stock turnover ratio, (iv) No. of days sales in debtors, (v) Return on capital employed, (vi) Return on proprietors' equity, (vii) Earnings per share.

Also comment briefly on whether or not you think the body corporate is in sound financial position with an acceptable profitability. Also point any weakness which the ratios indicate.

**Solution:**

(1) Current ratio = Current assets/ Current liabilities = 1,22,000/16,000 = 7.625:1

(2) Acid test ratio = Quick assets/ Quick liabilities = 81,000/16,000 = 5.06:1

(3) Stock turnover ratio = Cost of sales / Average stock

$$= 2,90,000 / 1/2 (30,000 + 40,000) = 8.3 \text{ times}$$

(4) Debtors turnover ratio = Debtors/ Sales \* 365 = 70,000/4,00,000\* 365 = 63.6 days

(5) Return on capital employed =

$$\begin{aligned} &= \text{Operating net profit/ Total assets - current liabilities*100} \\ &= 30,000/2,06,000*100 = 14.6\% \end{aligned}$$

(6) Earnings per share = Net profit after tax/ No. of shares = 18,000/1,200 =Rs. 15.

(7) Proprietary ratio = Proprietor's equity/ Total assets 1,56,000/2,21,000 = 0.71:1

Proprietary ratio indicates the stability of the long term financial position. Here 71% of the total resources of the corporation has been financed by the proprietors' funds, this shows that the body corporate can be considered very stable in the long run.

The current ratio and liquid ratio are as high as 7.625:1 and 5.06:1 respectively indicating a very strong position of the body corporate to meet its immediate obligation.

The turnover rate is 8.3 times indicating that the body corporate is managing its stock well. However the same cannot be said about realization of debtors. The collection from debtors is not quite satisfactory as the average collection period is approximately 64 days.

The return before tax on total resources is quite low at 13.6%. The return after tax on proprietors funds however is better at 15%. This improvement has been made possible because of the 6% debentures. The interest on debentures is much less than the per-tax return of 14.56% on the capital working. The operating net profit ratios is quite low at 7.5%. The ratio of net profit after tax to sales is lower at 4.5%.

Thus from the profitability point of view Apex Co. Ltd. is not successful.

#### 4.12 Practical Exercise:

1. The following are the summarized balance sheets of Armaan Ltd.

Balance Sheets

Liabilities	31-3-2000 Rs.	31-3-2001 Rs.	Assets	31-3-2000 Rs.	31-3-2001 Rs.
Share Capital	1,00,000	1,00,000	Fixed Assets :		
Reserves	90,000	1,00,000	Land & Building	50,000	50,000
9% Debentures	1,00,000	1,00,000	Plant & Machinery	2,00,000	1,80,000
Current Liabilities :			Current Assets :		
Sundry Creditors	40,000	60,000	Stock	55,000	65,000
Provision for			Sundry Debtors	30,000	40,000
Taxation	30,000	10,000	Cash	25,000	35,000

3,60,000	3,70,000	3,60,000	3,70,000
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**Additional Information :**

	<b>1998-99</b>	<b>1999-2000</b>
	<b>Rs.</b>	<b>Rs.</b>
Sales	3,75,000	2,92,000
Gross Profit	90,000	53,000
Net Profit (before interest and tax)	58,000	30,000

The stock on 1-4-1999 was valued at Rs. 45,000.

Calculate the following accounting ratios and comment in brief on each of them :

- (1) Current Ratio
- (2) Stock Turnover
- (3) Debtor's Ratio and Debtors Turnover
- (4) Return on Capital Employed.

2. The following are the summarized Profit & Loss Account of Pooja Ltd. for the year ending 31st March, 2000 and the Balance Sheet as on that date :

**Profit & Loss Account**

	Rs.		Rs.
To Opening Stock	2,10,000	By Sales :	
" Purchases	9,30,000	Credit 14,20,000	
" Gross Profit	6,00,000	Cash 80,000	15,00,000
		" Closing Stock By Gross Profit	2,40,000
	17,40,000		17,40,000
To Administrative Expenses			6,00,000
and Depreciation	2,60,000	" Profit on Sale of Assets	5,000
Selling Expenses .	65,000	" Interest	10,000
" Interest on Debentures	30,000		
" Net Profit	2,60,000		
	6,15,000		6,15,000

**Balance Sheet**

Liabilities	Rs.	Assets	Rs.
20,000 Equity Shares of		Land & Building	4,00,000
Rs. 10 each	2,00,000	Plant & Machinery	3,00,000
1,000 12% Preference Shares		Investments	1,00,000
of Rs. 100 each	1,00,000	Stock	2,40,000
Reserves	3,50,000	Debtors	1,00,000
Profit & Loss Account	2,00,000	Bills Receivable	42,000
Debentures	2,00,000	Cash & Bank	1,18,000
Creditors	1,30,000		
Bills Payable	60,000		
Bank Overdraft	60,000		
	13,00,000		13,00,000

From the above particulars, compute the following accounting ratios and give in brief their uses. (The necessary calculations should be based on taking 360 days in a year.)

(1) Gross Profit Ratio (2) Current Ratio (3) Debtors Ratio (4) Stock Turnover Ratio (Stock Ratio) (5) Return on Capital Employed.

3. The following is the Balance Sheet of Aayush Ltd. as on 31-3-2001 :

Liabilities		Assets	Rs.
40,000 fully-paid Equity shares each of Rs. 10/-		Goodwill	2,00,000
	4,00,000	Fixed Assets	6,00,000
12% fully paid Preference shares each of Rs. 100/-		Investments	80,000
	2,50,000	Stock	2,25,000
Reserves	2,10,000	Debtors	1,68,000
Profit & Loss Account	85,000	Cash	15,000
13.5% Debentures	1,50,000	Preliminary Expenses	13,000
Creditors	60,000		
Bank Overdraft	30,000		
Outstanding Expenses	1,16,000		
	13,01,000		13,01,000

Details of Profit & Loss Account in brief :

	Rs.
Total sales (75% on credit)	6,80,000
— Cost of sales	4,00,000
Gross Profit	2,80,000
— Depreciation and Managerial Expenses	90,000
Net Profit (Before deducting tax at 50%)	1,90,000

Stock on 31-3-2000 was Rs. 1,75,000.

From the above particulars, compute the following Accounting Ratios and give in brief their uses.

(The necessary calculations should be based on taking 360 days in a year.)

- (1) Current Ratio
- (2) Debtors Ratio
- (3) Return on Capital Employed
- (4) Rate of Return on Equity Capital
- (5) Stock Ratio
- (6) Net Profit (after tax) Ratio
- (7) Gearing Ratio.

4. Following is the summarized Balance Sheet of Manish Ltd. on 31-3-98.

Liabilities	Rs.	Assets	Rs.
Equity Shares of Rs. 10 each	10,00,000	Fixed Assets	20,00,000
10% Preference Shares of Rs. 100 each		Investments	2,00,000
	4,00,000	Closing Stock	2,00,000
Reserves and Surplus	7,00,000	Sundry Debtors	4,60,000
15% Debentures	5,00,000	Bills Receivable	70,000
Sundry Creditors	2,40,000	Cash at Bank	50,000
Bank Overdraft	1,70,000	Preliminary Expenses	60,000
	30,40,000		30,40,000

Summarized Profit and Loss Account is as under for the year ending on 31-3-98

	Rs.
Sales (25% Cash sales)	80,00,000
less : Cost of Goods sold	56,00,000
Gross Profit	24,00,000
Net profit (Before interest and tax 50%)	9,00,000

Calculate the following ratios :

(1) Rate on Return on Capital Employed (2) Proprietary Ratio (3) Debt-Equity Ratio (4) Capital-gearing Ratio (5) Debtors Ratio (365 days of the year.) (6) Rate of Return on Equity Shareholders Funds.

5. The following are Balance Sheets of Santosh Ltd. :

Liabilities	1996-97	1997-98	Assets	1996-97	1997-98
	Rs.	Rs.		Rs.	Rs.
Equity Share			Building	1,50,000	2,50,000
Capital	2,00,000	2,50,000	Machineries	1,00,000	50,000
10% Preference			Furniture	50,000	50,000
Share Capital	1,00,000	1,00,000	Stock	50,000	75,000
General Reserve	83,000	91,000	Debtors	1,50,000	1,25,000
15% Debentures	1,00,000	1,00,000	Bills Receivable	10,000	15,000
Creditors	8,000	10,000	Cash and		
Bills Payable	4,000	6,000	Bank	22,000	25,000
Provident Fund	8,000	4,000	Preliminary		
Provision for			Expenses	1,000	1,000
Taxation	10,000	5,000			
Bank Overdraft	20,000	25,000			
	5,33,000	5,91,000		5,33,000	5,91,000

**Additional Information :**

	<b>1996-97</b>	<b>1997-98</b>
	<b>Rs.</b>	<b>Rs.</b>
Total Sales (Cash sales are 3/5 of credit sales)	5,00,000	6,25,000
Gross Profit	1,00,000	1,50,000
Net Profit (before interest and taxes)	1,35,000	1,55,000
Opening Stock (1-4-1996)	30,000	

Assume: tax rate of 40%

From the above information you are required to calculate the following ratios for both the years and interpret the first three ratios. 300 days be taken for the year.

- (1) Net Profit Ratio (4) Current Ratio
- (2) Stock Turnover Ratio (5) Return on Capital Employed.
- (3) Debtors Ratio. .

**6. The following are the Summarized Balance Sheets of Aditya Ltd :**

Liabilities	31-3-97 Rs.	31-3-98 Rs.	Assets	31-3-97 Rs.	31-3-98 Rs.
Equity Capital	Share 1,50,000	2,50,000	Fixed Assets	4,20,000	5,40,000
10% Preference			Stock	65,000	92,500
Share Capital	1,00,000	1,00,000	Debtors	70,000	50,000
Reserves	70,000	1,20,000	Cash and Bank	15,000	7,500
10% Debentures	1,55,000	1,50,000	Prepaid Expenses	15,000	10,000
Bank O.D.	50,000	30,000			
Creditors	40,000	45,000			
Bills Payable	20,000	5,000			
	5,85,000	7,00,000		5,85,000	7,00,000

**Additional Information :**

	<b>1996-97</b>	<b>1997-98</b>
	<b>Rs.</b>	<b>Rs.</b>
Total Sales (Cash Sales are 4/5th of credit Sales)	9,00,000	13,50,000
Gross Profit	2,25,000	4,05,000
Net Profit (Before interest and tax, tax rate 50%)	1,59,000	2,85,000

Stock on 1-4-96 Rs. 70,000

From the above information, calculate the following accounting ratios for both the years :

- (1) Net Profit Ratio.
- (2) Stock Turnover Ratio.
- (3) Debtors Ratio (300 days to be taken for year).
- (4) Current Ratio.

**8:** Following are the profit and loss account and balance sheet of XYZ Ltd.

		Rs.		Rs.
To Cost of sales			By Sales	4,00,000
Opening stock	30,000			
Add: Purchases	<u>3,00,000</u>			
	3,30,000			
Less: Closing stock	<u>60,000</u>	2,70,000		
Less: Gross profit c/d		<u>1,30,000</u>		
		4,00,000		<u>4,00,000</u>
" Expenses		20,000	By Gross profit b/d	1,20,000
" Net profit c/d		<u>1,00,000</u>		
		<u>1,20,000</u>		<u>1,20,000</u>
" Provision for tax		40,000	By Net profit b/d	1,00,000
" Dividend		20,000		
" Net profit		<u>40,000</u>		
	Rs.	<u>1,00,000</u>	Rs.	<u>1,00,000</u>

Balance sheet as on 31st December, 19X3

Liabilities	Rs.	Assets	Rs.
Share capital (Rs. '10 each)	2,00,000	Plant and machinery	80,000
Reserve	10,000	Land and building	20,000
Profit and loss a/c	30,000	Stock	50,000
Creditors	60,000	Debtors	80,000
			<u>70,000</u>
Rs.	<u>3,00,000</u>	Rs.	<u>3,00,000</u>

Market price of an equity share is Rs. 30.

Calculate the following ratios and comment:

- (a) Stock turnover ratio, (b) Debtors turnover ratio, (c) Creditors turnover ratio
- (d) Return, on capital employed, (e) Return on proprietors' fund, (f) Earning per

share, (g) Price earning ratio, (h) Dividend pay out ratio.

**9:** Following is the profit and loss account and balance sheet of Hind Ltd. Redraft them for the purposes of analysis and calculate the following ratios:

(i) Gross profit ratio, (b) Net profit ratio, (c) Current ratio, (d) Debt equity ratio, (e) Stock turnover ratio, (f) Liquidity ratio,

Profit and loss account

Rs.			Rs.
Opening stock of finished goods	1,00,000	Sales	10,00,000
Opening stock of raw materials	50,000	Closing stock of raw materials	1,50,000
Purchase of raw materials	3,00,000	Closing stock of finished goods	
Direct wages	2,00,000	Profit on sale of shares	1,00,000
Manufacturing expenses	1,00,000		50,000
Administration expenses	50,000		
Selling and distribution exp.	50,000		
Loss on sale of plant	53,000		
Interest on debentures	10,000		
Net profit	3,87,000		
Rs.	13,00,000	Rs.	13,00,000

Balance sheet

Liabilities	Rs.	Assets	Rs.
Share capital:		Fixed assets	2,50,000
Equity share capital	1,00,000	Stock of raw materials	1,50,000
Preference share capital	1,00,000	Stock of finished goods	1,00,000
Reserves	1,00,000	Sundry debtors	1,00,000
Debentures'	2,00,000	Bank balance	45,000
Sundry creditors	1,00,000		
Bills payable	45,000		
Rs.	6,45,000	Rs.	6,45,000

10. M Ltd. furnishes the following statement:  
Balance Sheet as at 31st March, 19X8

Liabilities	Rs.	Assets	Rs.
3,000 Equity shares of Rs. 10 each fully paid-up		Land and buildings Plant and machinery	30,000 13,000
12% Debentures	20,000	Goodwill	20,000
Sundry creditors	10,000	Marketable securities	3,000
General reserve	8,000	Sundry debtors	10,000
P&L account	15,000	Stock	10,000
Provision for tax	8,000	Cash on hand	9,000
Bank overdraft	4,000		
	Rs. 95,000	Rs.	95,000

Other information for the year ended 31st March 19X8.

Sales	Rs. 3,50,000	Net margin	Rs. 14,000
Gross margin	Rs. 35,000	Provision for tax	Rs. 5,000

You are required to :

- (1) Arrange the Balance Sheet in the vertical form.
- (2) Calculate the following ratios and comment upon it.
 

(a) Acid test ratio.	(b) Proprietary ratio,
(c) Return on capital employed	(d) Return on equity,
(e) Working capital ratio.	(f) Gross and net profit ratio.

11. The following is the Balance Sheet of X Ltd, as on 31st March 19X4 :

	Rs.		Rs.
Share capital :			
10,000 10% Preference shares		Land and building	2,00,000
Rs. 10/- each fully paid	1,00,000	Plant and machinery	1,50,000
30,000 Equity shares of		Furniture	20,000
Rs. 10/- each fully paid	3,00,000	Stock	85,000
General reserve	90,000	Debtors	80,000
Share premium	10,000	Bills receivable	15,000
Profit and loss a/c	35,000	Prepaid expenses	5,000
Trade creditors	90,000	Cash in hand	35,000
Bills payable	26,000	Cash at bank	1,11,000
15% Debentures	50,000		
	Rs. 7,01,000	Rs.	7,01,000

Re-arrange the above Balance Sheet in a form suitable for analysis and calculate the following ratios :-.

- (a) Current ratio. (b) Liquid ratio.
- (c) Stock to working capital ratio. (d) Proprietary ratio, and
- (e) Capital gearing ratio.

12. From the following statements of A Ltd. for the year ending 31st March T9X5, you are required to rearrange the items in the form of financial statements suitable for analysis and calculate the following ratios and state the significance of each such ratio briefly:

- (1) Current ratio. (2) Liquid ratio.
- (3) Operating ratio. (4) Stock turnover, ratio.
- (5) Debtors turnover. (6) Net operating profit to capital employed.

Balance sheet as on 31st March 19X5

Liabilities	Rs.	Assets	Rs.
Share capital:-			
Issued and paid-up 5,000		Land and buildings	50,000
Equity shares of Rs. 10 each	50,000	Plant and machinery	20,000
General reserve	40,000	Stock	15,000
Profit and loss account	16,000	Debtors	25,000
Sundry creditors	30,000	Cash	26,000
Rs.	1,36,000	Rs.	1,36,000

Trading and Profit and Loss Account for the year ended 31st March 19X5

	Rs.		Rs.
To Opening stock	25,000	By Sales	1,80,000
" Purchases	1,05,000	" Closing stock	15,000
" Gross profit c/d	65,000		
Rs.	1,95,000	Rs.	1,95,000
To Administration expenses	23,000	By Gross profit b/d	65,000
" Selling expenses	10,000	" Profit on sale	
" Finance expenses	2,000	of fixed assets	5,000
" Net profit	35,000		
Rs.	70,000	Rs.	70,000

13. Following is the Balance Sheet of X Ltd, as at 31st March, 19X5.

Liabilities	Rs.	Assets	Rs.
6000 Equity shares of Rs. 10 each	60,000	Goodwill	26,000
2000 10% Preference shares of Rs. 10 each	20,000	Land and building	80,000
General reserve	30,000	Plant and machinery	40,000
Profit and loss a/c	16,000	Marketable investments	6,000
12% Mortgage loan	45,000	Sundry debtors	20,000
Sundry creditors	20,000	Inventory	20,000
Dena Bank - Current a/c	20,000	Cash on hand	19,000
Provision for taxation	4,000	Preliminary expenses	4,000
Rs.	2,15,000	Rs.	2,15,000

Further information for the year ended 31st March, 19X5:

	Rs.
(i) Turnover of sales	7,00,000
(ii) Gross profit	70,000
(iii) Net profit (after providing for taxation at 50%)	14,000
(a) You are required to present the balance sheet in vertical form	

14. The following are the Trading and Profit and Loss accounts of Y Ltd. for the years ended 31st December, 19X3 and 19X4 respectively :

	19X3 Rs.	19X4 Rs.		19X3 Rs.	19X4 Rs.
To Opening Stock	1,30,000	1,50,000	By Sales	18,00,000	22,00,000
" Purchases	13,70,000	17,90,000	" Closing stock	1,50,000	1,80,000
" Gross profit	4,50,000	4,40,000			
Rs.	<u>19,60,000</u>		Rs.	<u>19,50,000</u>	<u>23,80,000</u>
To Administrative expenses			By Gross profit	4,50,000	4,40,000
" Selling expenses	80,000	1,01,000			
" Debenture interests	18,000	18,000			
" Depreciation on furniture	7,000	10,000			
" Provision for taxation	93,000	55,000			
" Net profit	<u>72,000</u>	<u>55,000</u>			
Rs.	4,50,000	4,40,000	Rs.	4,50,000	4,40,000

Calculate the following ratios for the above two years and comment on the same :

- (a) Gross profit ratio. (b) Net profit ratio,
- (c) Operating ratio. (d) Stock turnover ratio.

15. The following are the comparative Profit and Loss accounts of ABC Pvt. Ltd. for the years ended 31st March, 19X8 and 31st March 19X9.

	31-3-19X8 Rs.	31-3-19X9 Rs.		31-3-19X8 Rs.	31-3-19X9 Rs.
To Opening stock	30,000	80,000	By Sales	16,87,000	23,65,000
" Purchases	10,40,000	15,20,000	" Closing stock	80,000	1,50,000
" Wages	2,00,000	3,00,000	" Interest on investments	15,000	15,000
" Salaries :					
Works manager	20,000	30,000			
General manager	60,000	80,000			
Sales manager	15,000	25,000			
Office staff	90,000	1,10,000			
Sales men	60,000	75,000			
" Depreciation :					
Plant & machinery	15,000	20,000			
Office equipments	10,000	8,000			
Vehicles	20,000	17,000			
" Rent :					
Factory	15,000	15,000			
Office	10,000	10,000			
Sales depot	12,000	15,000			
" Sundry office exp.	60,000	80,000			
" Sundry selling and distribution exp.	40,000	55,000			
" Loss on sale of fixed assets	25,000	10,000			
" Revenue tax	30,000	40,000			
" Net profit c/d	<u>30,000</u>	<u>40,000</u>			
Rs.	<u>17,82,000</u>	<u>25,30,000</u>	Rs.	17,82,000	25,30,000
To Transfer to			By b/fd	35,000	45,000
general reserve	10,000	10,000	" Net profit b/d	30,000	40,000
" Dividend	11,000	10,000			
" Balance c/fd	<u>44,000</u>	<u>65,000</u>			
Rs.	<u>65,000</u>	<u>85,000</u>	Rs.	<u>65,000</u>	<u>85,000</u>

(a) You are required to present the above in vertical form.  
 (b) Compute the following ratios :  
 (i) Gross profit ratios, (ii) Net "profit ratios, (iii) Stock turnover ratios.  
 (c) Comment on the above revenue statements.

16. From the following Balance Sheet of ABC Co. Ltd-, compute :

(i) Liquid ratio; (ii) Profitability ratio; (iii) Capital gearing ratio; (iv) Stock turnover ratio; (v) Debtors turnover ratio (number of days) and offer your comments in brief. ABC Co. Ltd. Balance Sheet as on 31st March, 19X5.

	Rs.		Rs.
Equity share capital	7,00,000	Fixed assets	9,00,000
Reserves	8,00,000	Stock	4,60,000
Secured loans	2,00,000	Sundry debtors	6,30,000
Current liabilities	2,55,000	Cash and bank	5,15,000
Provision	5,50,000		
Rs.	25,05,000	Rs.	25,05,000

Total sales during the year summed to Rs. 21,00,000 (including cash sales of Rs. 8,20,000) which yielded a Gross Profit of 33.33% on sales. The stock on 31st March, 19X4 was Rs. 2,40,000.

17. The following is the Balance Sheet of XYZ Ltd. as on 31st March, 19X5.  
 XYZ Ltd. Balance Sheet as on 31st March, 19X5

Liabilities	Rs.	Assets	Rs.
Equity share capital	10,00,000	Goodwill	3,00,000
10% Preference share capital	4,00,000	Land and building	7,00,000
General reserve	1,00,000	Plant and machinery	6,00,000
12% Debentures	2,00,000	Furniture and fixtures	50,000
Profit and loss a/c	1,00,000	Investments	50,000
Sundry creditors	1,40,000	Stock	2,40,000
Bills payable	20,000	Debtors	3,05,000
Bank overdraft	20,000	Bills receivable	50,000
Outstanding expenses	20,000	Cash in hand	35,000
Provision for taxation	45,000	Preliminary expenses	5,000
Provision for dividend	1,05,000	Prepaid expenses	15,000
Rs.	21,50,000	Rs.	21,50,000

Convert the above Balance Sheet into vertical form and calculate the following ratios:

(a) Current ratio, (b) Liquid ratio, (c) Proprietor's ratio, (d) Capital gearing ratio and (e) Stock-working capital ratio.

18. The following is the Balance sheet of B.S.M. Ltd, as at 31st March, 19X5:

Liabilities		Rs.	Assets		Rs.
Share capital			Fixed assets		8,70,000
5,000 Equity shares of			(less Depreciation)		
Rs. 100/-each	5,00,000		Current assets-		
2,000. 12% Pref.			Stock-in trade	2,00,000	
shares of Rs. 1 00			Sundry debtors	2,30,000	
each	<u>2,00,000</u>		Bills receivable	20,000	
	7,00,000		Cash on hand		
Reserves and surplus		3,00,000	and at bank	<u>1,00,000</u>	
12% Debentures		2,00,000			5,50,000
Current liabilities					
Creditors	1,70,000				
Bank overdraft	<u>50,000</u>				
	<u>2,20,000</u>				
	Rs.	14,20,000		Rs.	14,20,000

The following is the Body corporate's Revenue statement for the year ended 31st March, 19 X 5:

Rs.	
Net sale(Credit)	9,00,000
Cost of sales	<u>6.75,000</u>
Gross profit	2,25,000
Administrative expenses	52,000
Selling and distribution expenses	<u>61,400</u>
Operating profit (before tax)	1,11,600
Taxation	<u>45,000</u>
Operating profit (after tax)	Rs. <u>66,600</u>

From the above information, you are required to compute the following ratios:

(i) Current	(ii) Net profit
(iii) Liquid	(iv) Capital gearing
(v) Gross profit	(vi) Proprietary
(vii) Debtors' turnover	(viii) Stock working capital
(ix) Creditors' turnover	(x) Earning per share
(xi) Return on proprietors' funds	(xii) Expenses

(xiii) Return on-equity capital (iv) Debt service

(xvi) Price earning ratio (at a price of Rs. 300)

19. Following is the profit and loss account and balance sheet of Hetal Ltd. Profit and loss account for the year ended 31-12-19X3

Liabilities	Rs.	Assets	Rs.
To Cost of sales		By Sales	4,00,000
Opening stock	30,000		
Add: Purchases	<u>3,00,000</u>		
	3,30,000		
Less: Closing stock	<u>50,000</u>	2,80,000	
Less: Gross profit c/d	<u>1,20,000</u>		
	<u>4,00,000</u>		4,00,000
To Expenses	20,000	By Gross profit <b/f	1,20,000
To Net profit c/d	<u>1,00,000</u>		
	<u>1,20,000</u>		1,20,000
To Provision for tax	40,000	By Net profit b/d	1,00,000
To Dividend	30,000		
To Net profit	<u>30,000</u>		
	1,00,000		1,00,000

Balance sheet as at 31st December 19X3

Liabilities	Rs.	Assets	Rs.
Share capital (Rs. 10)	2,00,000	Plant and machinery	80,000
Reserve	10,000	Land and building	20,000
Profit and loss a/c	30,000	Stock	50,000
Creditors	60,000	Debtors	80,000
		Cash and bank	70,000
	3,00,000		3,00,000

Market price of an equity share is Rs. 5.

Calculate the following ratios:

(a) Stock turnover ratio, (b) Debtors' turnover ratio, (c) Creditors turnover ratio, (d) Return on capital employed, (e) Return on proprietors' fund, (f) Earning per share, (g) Price earning ratio, (h) Dividend pay out ratio.



