UNIT 7 CASH FLOW ANALYSIS

Structure

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7.0 OBJECTIVES

The objectives of this unit are to:

- explain importance of cash flow statement for investors and other stockholders;
- compare the differences between cash flow statement with other financial statements;
- explain regulations relating to preparation of cash flows;
- familiar with the methodology for preparation of cash flow statement and different components of cash flow statement; and
- comprehend how cash flow statement can be used in real life for different decision making.

7.1 INTRODUCTION

The statement of cash flows, required by the Accounting Standard-3, is a major development in accounting measurement and disclosure because of its relevance to financial statement users. Cash Flow Statement is reasonably simple and easy to understand. It is also difficult to fudge or manipulate the cash flow numbers and hence often used as a way to test the real profitability of the firm. For instance, if your company approaches a bank for a loan, your company will normally highlight the profitability of your business as your strength. But the bank

manager may not be sure how you arrived at the profit, particularly when we read lot of accounting related scams. Hence, the bank manager would like to examine whether you have actually earned the profit or not. Cash Flow Statement will be useful to examine whether the profits are realised and if so, to what percentage of profit a firm has realised. In other words, a company that shows high level of profit need not be liquid in cash. Suppliers of goods will also be interested to examine the cash flow position of the company before supplying goods on credit. Investor, who have no control on management, will also be interested in examining the cash flow to supplement her/his analysis on profitability of the business.

Activity 1

1) Before you read further, can you think about why profit reported in P&L account might be misleading? Can you think about some examples of how profit can be overstated?

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2) If you have identified some examples, can you think about why companies resort to do such things and also how you can find out if you are an outsider?

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7.2 NEED FOR CASH FLOW STATEMENT

The primary objective of the statement of cash flows is to provide information about an entity's cash receipts and cash payments during a period. The net effect of cash flow is provided under different heads namely cash flow from operating, investing and financing activities. It helps users to find answers to the following important questions:

a) Where did the cash come from during the period?

b) What was the cash used for during the period?

c) What was the change in the cash balance during the period?

The AS-3 identifies two important uses of cash flow statement as follows:

a) 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 amounts 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.

b) Historical cash flow information is often used as an indicator of the amount, 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.

A Statement issued by Securities and Exchange Board of India in 1995 when it made the cash flow statement mandatory also lists the above are primary objective of requiring the listed companies to provide cash flow statement to the investors.

The importance of cash flow as a measure of corporate performance and as a critical variable to appraise loan decisions has been supported by several influential persons or organisations. The importance of cash flow statements is clear from the following excerpts:

1) Harold Williams (the then chairman of the SEC) made the following comments in a speech to the Financial Executives Research Foundation:

Corporate earnings reports communicate, at best, only part of the story. And, their most critical omission - in recognition that insufficient cash resources are a major cause of corporate problems particularly in inflationary times - is their failure to speak to a corporation's cash position. Indeed, in my view, cash flow from operations is a better measure of performance than earnings-per-share. What should be considered is more revealing analytical concepts of cash flow or cash-flow-per-share, which reflect the total cash earnings available to management - that is earnings before expenses such as depreciation and amortization are deducted. An even more sophisticated - and, in my opinion, more informative - analytical tool is free cash flow, which considers cash flow after deducting such spiralling corporate costs as capital expenditures. This technique allows (evaluation of) the costs of maintaining the corporation's present capital and market position - cost which are, in essence, expenses and cash flow obligations that should be considered in determining the corporation's financial position. ***Arthur Young Views*** *(January 1981).*

2) Robert Morris Associates, a national association of bank loan and credit officers, advocates the use of cash flow analysis as a tool necessary to evaluate, understand, and accurately determine a borrower's ability to repay loans:

Banks lend cash to their clients, collect interest in cash, and require debt repayment in cash. Nothing less, just cash. Financial statements, however, usually are prepared on an accrual basis, not on a cash basis. And projections? Same thing. Projected net income, not projected cash income. Yet, cash repays loans. Therefore, we are compelled to shift our focus if we truly wish to assess our client's ability to pay interest and repay debt. We must turn our attention to cash, working through the roadblocks thrown up by accrual accounting, to properly evaluate the creditworthiness of our client. ***(RMA Uniform Credit Analysis, Philadelphia, Robert Morris Associates, 1982).***

Activity 2

1) Pick up annual report of a company and show the Balance Sheet and Profit and Loss account to your non-accounting friends. Ask them how comfortable in reading the two statements and record their observation here.

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2) Now, show the Cash Flow statements to them and ask them whether they are able to understand anything better about the company. Record their statements here.

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3) Examine the above two and record your overall assessment whether there is any improvement in their understanding.

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7.3 CASH FLOW STATEMENT VS. OTHER FINANCIAL STATEMENTS

The cash flow statement is different from other principal financial statements in many different ways. Financial statements like P&L account and Balance Sheet are prepared using accrual accounting principle. For instance, when a firm sells its products, it is assumed that profit is realised. It is assumed as a going concern, the firm will eventually realise its profits. Similarly, the expenses incurred against the sale are assumed to have incurred or paid irrespective of the fact whether cash is paid or not. Interest expenses are charged against profit though it is an outcome of financing decision. Several non-cash expenses like depreciation are also charged against profit. On the other hand, cash flow statement is prepared on the principle for cash accounting concept. It is simply a summary of cash book classified under three headings namely cash flow from operating, investing and financing activities. In a broad context, the cash flow from operating activities culls out all Profit and Loss Account entries of cash book (like sales, material, wages, etc.,) and summarise the same. The cash flow from investing activities summarises all the assets side entries like purchase of fixed assets, sale of fixed assets, etc., of cash book. Finally, the cash flow from financing activities summarises all the liability side entries like borrowing, repayment, fresh equity, etc. of cash book. The following table shows the Cash Flow Statement of a company, which simply summarises the cash book entries under different headings, which are easily readable.

Cash Flow Statement Under Direct Method

(A) Operating Activities			
Cash Collection from Sales		115716	
Less: Cash Paid for:			
Raw Materials	(18478)		
Direct Labour	(13452)		
Overhead	(8758)	(40688)	
Less: Cash Paid for Non-factory Costs:			
Salaries and Wages	(14625)		
Other Sales and Administration	(413)	(15038)	
Cash Generated from Operation			59990
Add: Interest Earned			390
Net Cash from Operating Activities (X)			**60380**
(B) Investment Activities			
Purchase of Plant Assets		(23000)	
Short-term investments		(12000)	
Net Cash Flow from Investing Activities (Y)			**(35000)**
(C) Financing Activities			
Dividends paid		(25000)	
Net Cash Flow from Financing Activities (Z)			**(25000)**
(D) Net Change in Cash (X – Y+Z)			**380**
Cash at the Beginning of the year			6000
Cash at the End of the Year			6380

Profit and Loss account is also equally readable but the problem is it may be confusing too. For example, many companies as a part of expenditure, put an additional entry titled “changes in stocks” or “increase/decrease in stocks” and sometime add and sometime deduct the value from sales. For example, see the next table, where we have reproduced Birla 3M Ltd. Profit and Loss Account for the year ended 31st December, 2001. As an accounting student, you will know that this is nothing but changes in opening and closing stock but a non-accounting reader will get confused. Many readers are not aware of the meaning of depreciation and also “Balance in Profit and Loss Account Brought Forward”. Starting from the year 2001-02, the P&L account has one more confusion for ordinary readers namely “Deferred Tax”. To add further confusion, in the Balance Sheet, it has both Deferred Tax Asset and Deferred Tax Liability. The mismatch between the depreciation value and deferred tax value shown in P&L account and Balance Sheet is further confusion to ordinary readers. As an accounting, you are familiar with all these jargons but it is really a maze for ordinary readers. They will give up after reading couple of pages.

The Balance Sheet is also equally puzzle to investors. Many students and even executives ask us if the company has huge reserves and surplus, does it mean the company has such amount of cash? Many of you after having some much accounting background would still have the doubt. In fact, when we answer such questions that Reserves will not be in the form of cash, then the next question is where is it or where it has gone or when it is not in the form of cash, why is it called ‘Reserves”? These are really genuine doubts to ordinary readers of financial statements. To a great extent, cash flow statement is free of this kind of confusion.

Profit and Loss Account for the Year Ended 31 December, 2001

	Schedule Number	For the year ended 31.12.2001	For the year ended 31.12.2000
Income:			
Sales		2,297,840,701	2,078,920,263
Other Income	13	18,576,299	10,484,038
		2,316,417,000	2,089,404,301
Expenditure:			
Finished Goods Purchased (traded)		1,065,927,769	1,054,428,027
Manufacturing, Administrative and Selling Expenses		827,610,543	747,207,666
Execise Duty Paid		107,210,150	99,240,285
Depreciation		60,747,768	47,550,244
(Increase)/decrease in inventories		22,942,022	(59,994,012)
Public issue expenses amortized		125,130	500,517
		2,084,563,382	1,888,932,727
Profit from Operations		231,853,618	200,471,574
Profit before tax		231,853,618	200,471,574
Provision for Income Tax		93,900,000	92,938,485
Net Profit		137,953,618	107,533,089
Balance in Profit & Loss (Account brought forward)		347,096,664	239,563,575
Balance Carried to Balance Sheet		485,050,282	347,096,664
Notes to Accounts	16		

Activity 3

1) Visit some of the web sites of large Indian companies, which have also issued American Depository Receipts (ADR). From the web sites, download the P&L account as per Indian Accounting Standards and also P&L account drawn under US accounting standards (called US GAAP). Compare the two statements and then briefly write your overall observations.

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2) Why do you feel that the two figures are different? List down some of the dominant reasons.

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3) Now, you check the cash flow statement reported under two systems and list.

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7.4 CASH FLOW STATEMENTS

In the previous unit you have learnt that flow of funds means change in working capital. An inflow of funds increases the working capital. Under cash flow analysis, all movements of cash, rather than the inflow and outflow of working capital would be considered. In other words, cash flow analysis, focuses attention on cash instead of working capital. When the movements of cash (i.e., cash inflow and cash outflow) is depicted in a statement, it is called Cash Flow Statement. Thus, a cash flow statement summarises the causes of changes in cash position of a business between two balance sheet dates. The flow of cash may be inflow or outflow. When cash inflows are more than the cash outflows, there would be an increase in cash balance. On the other hand, if cash outflows are more than the cash inflows, there would be decrease in cash balance. The term cash includes both cash and bank balances.

Availability cash, generally, determines the ability to meet the maturing obligations. If cash is not available and current obligations cannot be met, it may result in technical insolvency. Therefore, it is very essential for a business to maintain adequate cash balance. A proper planning of the cash resources will enable the management to have cash available whenever needed and employes surplus cash, if any, to the most profitable or productive use. For this purpose, we prepare cash flow statement which shows the sources and application during a year and the resultant effect on cash balance.

7.4.1 Sources and Uses of Cash

The change in the cash position is computed by considering 'Sources' and 'Applications' of cash which are as follows:

Sources of cash

The sources of cash includes:

1) Cash from Operations
2) Issue of Shares
3) Issue of Debentures
4) Long term Loans Raised
5) Sale of Fixed Assets

Application (uses) of cash

Application of cash includes the following:

1) Redumption of Preference Shares
2) Redumption of Debentures
3) Repayment of Loans
4) Purchase of Fixed Assets
5) Payment of Dividends
6) Payment of Taxes

7.4.2 Ascertaining Cash from Operations

You have learnt that the main purpose of preparing a cash flow statement is to explain the increase/decrease in the cash balance between the two balance sheet dates and that it is prepared on the same pattern as the fund flow statement. Just as the net profit is adjusted to ascertain the amount of funds from operations, the funds from operations are now adjusted to ascertain the cash from operations. For this purpose, you have to look at the changes in current assets and current liabilities that have taken place during the year.

Conversion of 'Funds from Operations' to 'Cash from Operations' is necessary because, under the working capital concept, funds from operations are based on accrual concept of accounting, and total sales (whether credit or cash) and total purchases (whether credit or cash) are recognised as sources and uses of working capital respectively. But under a cash concept of funds only cash sales and receipts from debtors are treated as sources of cash, while cash purchases and payment to creditors are regarded as uses of cash. The same holds good for the other incomes and expenses. Therefore, funds from operations (based on the accrual concept) require conversion into cash from operations (based on cash accounting). For example, assume that a business was started on 1-1-2003 and the sales during the year were Rs. 3,00,000. Also assume that there were no closing debtors. As there are no opening and closing debtors, it must be assumed that the entire amount of Rs. 3,00,000 was realised by way of cash. Now assume that the closing debtors on 31-12-2003 were Rs. 40,000. This would mean that the entire amount of sales were not collected during the year. Since Rs. 40,000 (closing debtors) was still to be realised, the cash from sales would be Rs. 2,60,000 (Rs. 3,00,000 – Rs. 40,000).

The closing debtors on 31-12-2003 would become opening debtors on 1-1-2004. Assume further that sales during 2004 were Rs. 4,00,000 and the closing debtors on 31-12-2004 were Rs. 50,000. In that case, the cash received from sales during the year 2004 be ascertained as follows:

	Rs.
Opening Debtors as on 1-1-2004	40,000
Add : Sales during the year	4,00,000
	4,40,000
Less: Closing Debtors as on 31-12-2004	50,000
Cash from Sales during the year	**3,90,000**

The same result can also be obtained by subtracting the increase in debtors from the sales during the year as shown hereunder.

Sales during the year (2004)	4,00,000
Less: Increase in Debtors during the year (Closing debtors Rs. 50,000 – Opening debtors Rs. 40,000)	10,000
Cash from sales during the year	**3,90,000**

Cash from Operations can be calculated on the basis of the following equation:

Cash from Operations = Net profit + Opening Debtors at the beginning of the year – Closing Debtors at the year end

or

= Net Profit + Decrease in Debtors

or

– Increase in Debtors

Similarly, in the case of credit purchases decrease in the creditors from one year to another year will result in decrease of cash from operations because more cash payments have been made to the creditors which will result in outflow of cash. On the other hand, increase in creditors from one period to another will result in increase of cash from operations as less amount has been paid to the creditors which result in increase of cash balance in the business.

The effect of cash purchases in computing cash from operations can be calculated as follows:

Cash from operations = Net profit + Increase in Creditors
or
– Decrease in Creditors

Similar is the case of Opening and Closing Stock. When opening stock is charged to Profit and Loss account it reduces the net profit and when closing stock is credited to Profit and Loss account it increases the net profit without corresponding change in cash from operations. Therefore, the net profit needs for adjustments to arrive at cash from operations as follows:

Cash from Operations = Net Profit + Opening Stock – Closing Stock
or
= Net Profit + Decrease in Stock
or
– Increase in Stock

The effect of outstanding expenses, Incomes received in advance on cash from operations is similar to the effect of Creditors i.e., any increase in these expenses will result in increase in cash from operations and any decrease results in decrease in cash from operations. This is on account of profit from operations calculated after charging all expenses whether paid or outstanding. In case of income received in advance, it is not be taken into account while preparing profit from operations as it relates to the next year. Therefore, the cash from operations will be higher than the actual net profit shown by the Profit and Loss Account. Therefore, it should be added to net profit while calculating cash from operations. Prepaid expenses do not have effect on the net profit for the year but it decreases cash from operations. Prepaid expenses of the current year should be taken as an outflow of cash in the cash flow statement, but the expenses paid in the previous year do not involve outflow cash in the current year but they are charged to the Profit and Loss Account. Therefore, prepaid expenses of the previous year which are related to current year should be added back while calculating cash from operations. Similarly, accrued income will increase the net profit for the year without corresponding increase in cash from operations.

Therefore, the effect of prepaid expenses and accrued income on cash from operations will be shown as follows:

Cash from operations = Net profit + Decrease in Prepaid Expenses and Accrued Incomes

– Increase in Prepaid Expenses and Accrued Incomes

From the above discussion it may be summed up as *increase in current assets and decrease in current liability will have the effect of decrease in cash* from operations and *decrease in current asset and increase in current liability will have the effect of increase in cash from operations.*

Illustration 1

Calculate Cash from Operations from the following information :

Profit and loss account for the year ended 31st March, 2005

Particulars	Rs.	Particulars	Rs.
To Purchases	40,000	By Sales	60,000
To Wages	10,000		
To Gross Profit c/d	10,000		
	60,000		60,000
To Salaries	2,000	By Gross Profit b/d	10,000
To Rent	2,000	By Profit on Sale of Building	10,000
To Depreciation on Plant	2,000		
To Loss on Sale of Furniture	1,000		
To Goodwill written off	2,000		
To Net Profit	11,000		
	20,000		20,000

Additional information:

	Balance as on	
	31st March, 2004	31st March, 2005
Stock	20,000	24,000
Debtors	30,000	40,000
Creditors	10,000	15,000
Bills receivable	10,000	16,000
Outstanding expenses	6,000	10,000
Bills payable	8,000	4,000
Prepaid expenses	2,000	1,000

Calculate Cash from Operations.

Solution

Calculation of Cash from operations

		Rs.
Net Profit as per Profit and Loss account		11,000
Add : Non-cash items: (i.e., Items which do not result in outflow of cash)	**Rs.**	
Depreciation on Plant	2,000	
Loss on sale of Furniture	1,000	
Goodwill written off	2,000	
Increase in Creditors	5,000	
Increase in Outstanding expenses	4,000	
Decrease in Prepaid Expenses	1,000	15,000
		26,000
Less: Non-cash items (i.e., items which do not result in inflow of cash):		
Profit on Sale of Building	10,000	
Increase in Stock	4,000	
Increase in Debtors	10,000	
Increase in Bills receivable	6,000	
Decrease in Bills payable	4,000	34,000
Outflow of Cash from Operations		(—) 8,000

7.5 PREPARATION OF CASH FLOW STATEMENT

The cash flow statement is similar to fund flow statement. You have learnt in Section 7.4 that, apart from cash from operations, the source and uses of cash are the same as those shown in the fund flow statement. Usually, cash flow statement starts with the opening cash balance followed by the details of sources and uses of cash. The opening balance plus the sources of cash minus the uses of cash should be exactly to the closing balance of cash which is shown as the last item in the cash flow statement. A cash flow statement can be prepared either in Vertical form or an Account form as shown below:

Vertical Form of
Cash Flow Statement
for the year ending .....

	Rs.	Rs.
Cash Balance on 1.1.20		.....
Add : Sources of Cash		
Cash from Operations	.....	
Issues of shares	.....	
Raising of long-term loans	.....	
Sale of fixed assets	.....	
		.....
Less: Uses of Cash		
Redemption of redeemable preference shares	.....	
Redemption of debentures	.....	
Repayment of long-term loans	.....	
Purchase of fixed assets	.....	
Payment of tax	.....	
Payment of Dividends	.....	
		.....
Cash Balance as on 31-12-20.....		

Account Format

The cash flow statement can also be prepared in an account form starting with an opening balance of cash on its debit side and ending with the closing balance of cash on its credit side as shown below:

Account Form of
Cash Flow Account for the year ending.....

	Rs.		Rs.
To Opening Cash Balance	.....	By Redumption of Preference Shares...	
To Cash from Operations	.....	By Redumption of Debentures	.....
To Issue of Shares	.....	By Repayment of Long term Loans	.....
To Long term Loans	.....	By Purchase of Fixed Assets	.....
To Sale of Fixed Assets	.....	By Payment of Tax	.....
		By Payment of Dividends	.....
		By Cash Balance (closing) (Balancing figure)	.....

7.6 REGULATIONS RELATING TO CASH FLOW STATEMENT

Accounting standards in India are formulated by the Accounting Standards Board (ASB) of the Institute of Chartered Accountants of India (ICAI). Though International Accounting Standard Committee has revised the International Accounting Standard-7 (IAS-7) in 1992 and switched over to cash flow statement, Accounting Standard-3 (AS-3) of ASB, which is equivalent to earlier IAS-7, was not revised till 1997. In 1997, ASB of ICAI revised the AS-3 in line with revised IAS-7 and issued an accounting standard on reporting cash flow information (see AS-3 full text given in http://www.icai.org.). However, this standard was not been made mandatory immediately in 1997. However, AS-3 was made mandatory for the accounting period starting on or after 1st April 2001 for the following enterprises:

i) Enterprises whose equity or debt securities are listed on a recognised stock exchange in India, and enterprises that are in the process of issuing equity or debt securities that will be listed on a recognised stock exchange in India as evidenced by the board of directors' resolution in this regard.

ii) All other commercial, industrial and business reporting enterprises, whose turnover for the accounting period exceeds Rs. 50 crore.

Since ASB of ICAI took a long time for the introduction of cash flow statement, the SEBI had formed a group consisting of representatives of SEBI, the Stock Exchanges, ICAI to frame the norms for incorporating Cash Flow Statement in the Annual Reports of listed companies. The group has recommended cash flow statement to be supplied by listed companies. SEBI, following the recommendation of the group, has instructed the Governing Board of all the Stock Exchanges to amend the Clause 32 of the Listing Agreement as follows:

"The company will supply a copy of the complete and full Balance Sheet, Profit and Loss Account and the Directors Report to each shareholder and upon application to any member of the exchange. The company will also give a Cash Flow Statement along with Balance Sheet and Profit and Loss Account. The Cash Flow Statement will be prepared in accordance with the Annexure attached hereto".

Cash Flow Statement, as a requirement in the Listing Agreement, has been made effective for the accounts prepared by the companies and listed entities from the financial year 1994-95. Cash Flow Statement, as a requirement of the Listing Agreement, has been made effective for the accounts prepared by the companies listed in stock exchanges from the financial year 1994-95.

Activity 4

1) Read carefully the AS-3 given in http.//www.icai.org. Write in your own words, the objectives, scope and benefit of the Cash Flow Information.

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2) Download the cash flow statement of a company (visit the web site) for two years and read the statement carefully. Write your observation whether the benefits stated in the AS-3 is actually true.

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3) List down your difficulties in understanding cash flow statement given in the annual reports.

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7.7 CASH FLOW STATEMENT FORMATS

The statement of cash flow requires restating of the information presented on a Balance Sheet but in flow format. The Balance Sheet is prepared by measuring the assets and liabilities at a point of time, usually as on March 31st of the year. In flow statements, whether it is funds flow or cash flow, we measure the changes in assets and liabilities during the period. For example, the liability side of the Balance Sheets contains so many items, which are essentially brought funds for the company. How much of cash is received under each item or how much cash was given back on each item constitute one part of the cash flow statement. Similarly, cash flows on the assets sides are also computed. The changes in retain earning part of the Balance Sheet actually reflect Profit and Loss Account. Cash Flow statement separately computes cash generated and paid for various operating activities. Cash Flow Statement can be prepared in two ways. They are called direct and indirect method. Actually, these two methods differ on the part in which we compute cash from operating activities. It may be noted that AS-3, IAS-7 and also FASB Statement No. 95 all recommend presentation of the direct method in the primary statement though firms are allowed to use either method. However, companies normally provide the statement in indirect format and you will shortly realise some of the reasons behind such practice. While direct method logically summarises cash flow movement under broad operating heads, indirect method works backward from Net profit and remove all non-cash income and expenses to get cash from operating activities. The format used under these two methods are given below:

Table 1

Cash Flow Statement Under Listing Agreement and IAS-7

IAS-7 (Indirect Method) / SEBI Format	IAS-7 (Direct Method)
A. Cash flow from operating activities	**A. Cash flow from operating activities**
Net profit before tax & extraordinary items	Cash receipt from customers
Adjustments for:	
Depreciation	Less: Cash paid to suppliers & other operating expenses
Foreign Exchange	
Investments	
Operating Profit before working capital changes	
Adjustments for:	
Trade and other receivables	
Inventories	
Trade Payables	
Cash generated from operations	**Cash generated from operation**
Less: Interest paid	Less: Interest paid
Direct tax paid	Income tax paid
Cash flow before extraordinary items	**Cash flow before Extraordinary items**
Extraordinary items	Less: Extraordinary items
Net Cash from / (used in) operating activities	**Net Cash from / (used in) operating activities**
B. Cash flow from investing activities	**B. Cash flow from investment activities**
Purchase of fixed assets	Purchase of fixed assets
Sale of fixed assets	Proceeds from sale of fixed assets
Acquisition of companies	Investment in subsidiaries
Purchase of investments	Investment in trade investment
Sale of investments	Loans and Advances Taken/(returned)
Interest Received	Current investments made
Dividend Received	Interest/Dividend Received
Net cash used in investing activities	**Net cash used in investing activities**
C. Cash flows from financing activity	**C. Cash flows from financing activity**
Proceeds from issue of share capital	Proceeds from issue of share capital
Proceeds from long-term borrowings(net)	Proceeds from long-term borrowings
Repayment of financial lease liabilities	Repayment of Loans
Dividend paid	Dividend paid
Net Cash used in financing activities	**Net Cash used in financing activities**
Net Increase in cash & cash equivalents	**Net Increase in cash & cash equivalents**

Direct Method

Under Direct method, the difference between cash receipts from customers and cash paid to suppliers and other operating expenses represents ‘‘cash generated from operations’’. Both cash receipts from customers and cash paid to suppliers and operating expenses can be calculated as follows:

Cash receipts from customers :

Cash sales during the year			xxx
Credit sales during the year		xxx	
Add : Sundry debtors at the beginning	…	xxx	
" Bills receivable at the beginning	…	xxx	

	Less : Sundry debtors at the end	xxx		
	" Bills receivable at the end	...	xxx	xxx
Cash receipts from the Customers				xxx
Cash paid to Suppliers and employees				
Cost of goods sold		xxx		
Operating expenses		xxx		xxx
Add :	Sundry creditors at the beginning		...	
	Bills Payable at the beginning		...	
	Outstanding expenses at the beginning		...	
	Stock at the end		...	
	Prepaid expenses at the end		...	xxx
				xxx
Less:	Sundry Creditors at the end		...	
	Bills Payable at the end		...	
	Stock at the beginning		...	
	Prepaid expenses at the beginning		...	xxx
	Cash paid to Suppliers and employees			xxx

Under direct method all non-cash transactions such as depreciation, goodwill, preliminary expenses, discount on shares and/or debentures etc. and loss or profit on sale of assets and investments are to be ignored as these are non-cash transactions. Similarly, non-operating income such as income from interest and dividends are not to be considered.

The cash flows associated with extraordinary items like bad debts recovered, insurance claim received, loss of stock by fire, earthquake etc., cash flows from interest and dividends received and paid should be disclosed separately.

Cash flow from operating activities is computed under the following heads using a set of equation listed against each.

Cash Flow Item	**Methodology**
Cash collection from customers	Sales – Increase in Accounts Receivables + Decrease in AccountsReceivables
Cash Paid to suppliers	Cost of Goods Sold – Decrease in Inventory + Increase in Inventory
Cash Paid to Employees	Salary Expenses – Increase in accrued/outstanding Salaries payable + Decrease in accrued/outstanding Salaries payable
Cash Paid for Other operating expenses	Other Operating Expenses – Depreciation and other non-cash expenses – Decrease in prepaid expenses – Increase in outstanding operating expenses + Increase in prepaid expenses + Decrease in outstanding operating expenses
Cash paid/received for interest	Net Interest Expenses (expense-income) – Increase in outstanding interest + Decrease in outstanding interest – Increase in interest receivable + Decrease in interest receivable

Cash from dividend or other sources	Dividend or Other Income + Decrease in other income receivable – Increase in other income receivable
Cash Paid for Taxes	Tax Expense – Increase in deferred tax liability + Decrease in deferred tax liability – Decrease in deferred tax asset + Increase in deferred tax asset – Increase in taxes payable + Decrease in taxes payable – Decrease in prepaid taxes + Increase in prepaid taxes.

For some of you the above table may be confusing but it is relatively easier to understand. The first item of the equation is actually the figure you get from P&L account. We know the figure that has given in the P&L account is mostly based on accrual concept and hence include 'non cash' part. The second and subsequent lines of the equation are actually for weeding out the 'non cash' part to get the 'cash' part of the expenses. Take a simple item of the above table namely 'cash paid to employees'. The figure Salary and Wages given in the P&L account need not be equal to actual salary and wages that the company has paid. For instance, the company may not have paid March month salary on 31st March as many companies pay their work on 7th of every month. We know this item will appear under salary outstanding. To get the cash amount of salaries and wages, we need to deduct, salary outstanding. Suppose, there is a salary outstanding at the beginning of the year, which means that the company has not paid some salary last year. Assume this value be Rs. 15 lakhs. At the end of the year, the company has not paid March salary and assume this value be Rs. 25 lakhs. If the outstanding salary account at the end of the year shows Rs. 25 lakhs, it means the company would have paid Rs. 15 lakhs of the previous year salary during the current year. Though this Rs. 15 lakhs will not be included in salary expense shown in P&L account (there is no need to show this value as it relates to previous year expenses), we need to consider the same for computing cash paid for salary, where we are not bothered whether the expenses is related to last year or current year. Suppose, if the salary expenses shown in the P&L account is Rs. 300 lakhs, we deduct from Rs. 300 lakhs, a value equal to Rs. 10 lakhs (Rs.25 lakhs – Rs. 15 lakhs) and state that cash paid for salary is equal to Rs. 290 lakhs. This value represents Rs. 275 lakhs salary of this year and Rs. 15 lakhs salary of the previous year and both paid during the year. Try to develop such logic for each of the equation to understand the concept better.

A comprehensive illustration is provided in the next section.

Indirect Method

Under this method net profit or loss is adjusted for the non-cash items as well as the items for non-operating incomes. The net profit or loss as shown by the profit and loss account cannot be treated as cash from operations. As you are aware that there are certain items like depreciation, goodwill, preliminary expenses etc., which appear or the debit side of profit and loss account but do not affect cash. Such items are added back to net profit. Similarly, items of non-trading incomes like profit on sale of fixed assets, interest and dividend received on investments, refund of taxes, provision for discount on creditors etc., which appear on credit side of profit and loss account, should be deducted from net profit to find out cash from operation.

In addition to the above, there are also certain items which do not appear in the profit and loss account, but have effect on cash. Such items represent changes in current assets and current liabilities. All these adjustments must be made to the net profit or loss as shown by the profit and loss account to ascertain actual amount of cash flow from operations. The proforma for computing the actual cash flow from operations is given below:

Proforma for
Computation of Cash Flow from Operating Activities

			Rs.
Net Profit (Before tax and Extraordinary items)		Rs.	.....
Add : Adjustments for :	Depreciation	.....	
	Misc. Expenses written off	.....	
	Foreign Exchange	.....	
	Loss on sale of fixed assets	.....	
	Interest expenses	.....	
	(—) Profit on sale of Fixed asset	.....	
	(—) Dividend received	.....	.....
Operating Profit before Working Capital Changes			.....
Add :	Adjustment for (working capital changes) :		
	Decrease in current assets (Excluding cash and equivalents)		
	Increase in current liabilities	.....	.....
Less :	Increase in current Assets	.....	
	Decrease in current Liabilities	.....	
	Cash generated from operating activities		.....
Less :	Income tax paid		.....
	Cash flow before extraordinary items		.....
Add :	Income from extraordinary items:		.....
	Bad debts recovered	.....	
	Insurance claim received	.....	
	Income from lottery		
	Gain from exchange operations etc.	.....	.....
Less :	Loss from extraordinary items :		
	Loss of stock from fire, floods etc.	.....	
	Loss from earthquake	.....	
	Loss from exchange operations	.....	.....
Net Cash from Operating activities			xxxx

Here under indirect method, you will be seeing a lot of adjustments. These adjustments are mainly to remove non-cash items. For example, if a firm sells Rs. 3000 worth of goods but received only Rs. 2000 and the balance is not received at the end of the period, the receipt of Rs. 2000 can be found out using P&L and Balance sheet values. Assume the company has an opening receivables balance of Rs. 2000. Immediately after the sale, it should have gone up to Rs. 5000 and when it collects Rs. 2000, the closing balance should be Rs. 3000. So, we have the following figures in our P&L and Balance Sheet.

Receivables (opening balance)	Rs. 2000
Receivables (closing balance)	Rs. 3000
Sales	Rs. 3000

Thus, the cash collected from customers is equal to Opening Receivables Balance plus Sales less Closing Receivables Balance i.e. Rs. 2000+3000 —3000 = Rs. 2000. Alternatively, we can deduct Rs. 1000 (which is the changes in opening and closing receivable balance) as adjustment to see the impact of the credit sales on the cash.

We will discuss more on these issues in the next section. At this stage, you note down that cash flow statement shows three important values: Net Cash Generated through Operating Activities, Net Cash spent for Investing Activities and finally, net cash generated through financing activities.

In the part one of the table, we have removed non-cash items and in the second part, we removed the impact of changes in inventory. While removal non-cash expenses or income included in the net income is obvious, when changes in current assets and liabilities are adjusted. A firm invests in current assets (raw materials, receivables, etc.) and acquire current liabilities mainly operating purpose. An increase in current assets means spending some money to buy fresh current assets during the period but not necessarily the firm incurs that amount fully. Since part of the amount is received through current liabilities (creditors), we also look into the changes in current liabilities. For instance, if inventory increases by Rs. 50 lakhs and creditors also increases by Rs. 20 lakhs, it means the company has spent Rs. 30 lakhs cash and hence it has negative impact on the cash value.

7.8 CASH FLOW FROM OPERATING ACTIVITIES

We use an illustration to explain the three important items of cash flow statement. Before you proceed further, read the Cash Flow Statement of Infosys Technologies Ltd. given below:

Infosys Technologies Ltd .			
Cash Flow Summary	2001-02	2000-01	1999-00
Cash and Cash Equivalents at Beginning of the year	577.74	508.37	416.66
Net Cash from Operating Activities	834.22	560.49	259.41
Net Cash Used In Investing Activities	–280.23	–451.3	–146.2
Net Cash Used In Financing Activities	–104.77	–39.82	–21.54
Net Inc/(Dec) In Cash And Cash	449.22	69.37	91.71
Cash And Cash Equivalents At End of the year	1,026.96	577.74	508.37
Cash Flow From Operating Activities	**2002-03**	**2001-02**	**2000-01**
Net Profit Before tax & Extraordinary Items	943.39	696.03	325.65
Adjustment For Depreciation	160.65	112.89	53.23
Interest(Net)	–51.23	–38.47	0
Dividend Received	0	0	0
P/L on Sales of Assets	–0.09	–0.09	0
P/L on Sales of Invests	0	0	0
Prov. & W/O(NET)	0	15.29	0
P/L In Forex	–13.26	–20.17	0
Others	–139.96	–85.18	–36.71
Op. Profit Before Working Capital Changes	899.5	680.3	342.17
Adjustment For			
Trade & other Receivables	–34.36	–166.2	–58.3
Inventories	0	0	0
Trade Payables	–5.16	60.93	42.65
Loan & Advances	–39.02	–34.72	–41.5
Direct Taxes Paid	0	0	–35.54
Cash Flow Before Extraordinary Items	820.96	540.32	249.48
Extraordinary Items			
Gain on Forex Exchange Transaction	13.26	20.17	9.93
Net Cash Flow From Operating Activities	**834.22**	**560.49**	**259.41**

The first part of the table shows the summary of Cash Flows of Infosys Technologies Ltd. and the second part lists detail working of Net Cash Flow Operating Activities. Infosys has generated Rs. 834.22 cr. during the year 2001-02 through its operation against Rs. 560.49 cr. during the previous year. How this is comparable with the net profit figure? It is comparable for this company since during the year 2001-02, the company reported a net profit value of Rs. 807.96 cr. But it need not be true for other companies where the net profit and cash from operating activities may show substantial difference. For instance, Pentamedia Graphics Ltd. has reported a net profit of Rs. 98.75 cr. for the year ending March 2002 whereas for the same period, its cash flow from operating activities is a negative value of Rs. 360.88 cr. There could be several reasons for such wide difference between the reported book profit and cash flow from operating activities.

In the Infosys Cash Flow Statement, the first part of the adjustment is related to removing non-cash expenses and income and the second part of adjustment is related to impact of changes in current assets and liabilities. In the third part, cash arising out of extraordinary items is shown separately since the profit figure of the first line excludes such extraordinary items. In terms of relative importance, the part one adjustments are high value. While this may be true for companies like software where working capital is not high, the second component may be large for manufacturing companies. For instance, the cash flow statements of Cipla Ltd. for the year ending 2002 shows an adjustment factor of Rs. 1.25 cr. (negative) for non-cash items against Rs. 183.13 cr. (negative) for working capital items. The adjustments relating to extra-ordinary items is not a regular feature and in the Cipla's case, it has not shown any value in the last three years. An analysis of component of the three operating items shows further insight on where the cash is drained. A year-to-year comparison also shows how much of additional amount is being pumped in each of these items. While such an analysis is possible with balance sheets figures alone, an analysis on cash basis is much simpler and straight forward without any accounting principles and policies related issues. Increasingly, users of financial statement rely on cash flow statement for this reason.

Activity 5

1) Collect Cash Flow from Operations of few companies and examine how is related to Profit reported in P&L account?

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2) Compare the each components of cash flow from operating activity over the period and record your observations here.

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7.9 CASH FLOW FROM INVESTING AND FINANCING ACTIVITIES

Measuring cash flow from investing and financing activities is simple and straightforward. Any amount spent in purchase of fixed assets forms part of investing activities. For instance if a firm spends Rs. 20 lakhs to buy new assets and also sold Rs. 3 lakhs worth of assets for Rs. 8 lakhs, the net cash flow on investing activities is Rs. 12 lakhs (Cash outflow of Rs.20 lakhs less Cash inflow Rs. 8 lakhs). Similarly, it is easier to compute cash flow from financing activities. Here we will try to find out the fresh equity and loan that the company has raised during the period and from that we deduct loan amount repaid. In addition to this, we also deduct dividend since dividend is outcome of financing activities. However, you may wonder why interest is not deducted here since it is also related to financing activity. There is no straight answer to this but accounting standards require interest to be shown as an cash outflow item in operating activities.

The cash flow from investing and financing activities of Infosys is given below. Infosys is spending a lot on fixed asset acquisition during the last three years. At the same time, it is not raising any fresh capital and hence its cash flow financing activities is also negative due to high dividend payment.

Cash Flow From Investing and Financing Activities of Infosys Technologies Ltd.

Cash Flow From Investing Activities	2002-03	2001-02	2000-01
Investment In Assets :			
Purchased of Fixed Assets	−322.74	−463.4	−159.9
Sale of Fixed Assets	1.6	0.23	0.1
Financial/Capital Investment:			
Purchase of Investments	−10.32	−26.65	−13.08
Sale of Investments	0	0	0
Investment Income	0	0	26.69
Interest Received	51.23	38.47	0
Dividend Received	0	0	0
Invest. in Subsidiaries	0	0	0
Net Cash Used in Investing Activities	**−280.23**	**−451.3**	**−146.2**
Cash Flow From Financing Activities	**2002-03**	**2001-02**	**2000-01**
Proceeds:			
Proceeds from Issue of share capital	0	0	1.76
Dividend Paid	−109.37	−42.2	−19.93
Others	4.6	2.38	−3.37
Net Cash Used in Financing Activities	**−104.77**	**−39.82**	**−21.54**

Illustration 2 Using the P and L account and Balance Sheet given below, prepare Cash Flow Statement both under direct and indirect method.

Profit and Loss Account for the year ended 31st March, 2005

(Rs. in thousands)

	Year 2004-05	**Year 2003-04**
Sales	111780	98050
Other Income	390	220
Cost of Goods Sold	41954	39010
Selling and Administrative Expenses	16178	12500
Profit Before Tax	54038	46760
Less: Income Tax	21615	18704
Profit After Tax	32423	28056

(b) Balance Sheet as on 31st March, 2005

(Rs. in thousands)

Liabilities and Shareholder Equity		As on 31-3-05	As on 31-3-04
Equity Share Capital		180000	180000
Retained Earnings		134045	101622
Current Liabilities			
Accounts Payable		3526	4330
Income Tax Payable		21615	—
Dividend Payable		—	25000
Total Liabilities		339186	310952
Assets			
Fixed Assets	393000 (370000)		
Less: Depreciation	92400 (90000)	300600	280000
Current Assets			
Cash		6380	6000
Accounts Receivable:	20064		
Less: Provision –	(972)	19092	23568
Inventory : Raw Materials		516	636
Finished Good		598	748
Investments		12000	—
Total Assets		339186	310952

Solution

Cash Flow Statement Under Direct Method (Rs. in thousands)

(A) Operating Activities			
Cash Collection from Sales		115716	
Less: Cash Paid for:			
Raw Materials	(18478)		
Direct Labour	(13452)		
Overhead	(8758)	(40688)	
Less: Cash Paid for Non-factory Costs:			
Salaries and Wages	(14625)		
Other Sales and Administration	(413)	(15038)	
Cash Generated from Operation			59990
Add: Interest Earned			390
Net Cash from Operating Activities			60380
(B) Investment Activities			
Purchase of Plant Assets		(23000)	
Short-term investments		(12000)	
Net Cash Flow from Investing Activities			(35000)
(C) Financing Activities			
Dividends paid		(25000)	
Net Cash Flow from Financing Activities			(25000)
(D) Net Change in Cash			**380**
Cash at the Beginning of the year			6000
Cash at the End of the Year			6380

Cash Flow Statement Under Indirect Method/as per Listing Agreement

(A) Operating Activities			
Profit After Tax or Net Income		32423	
Adjustments for:			
Depreciation	2400		
Trade Receivables	4476		
Inventories	270		
Income Tax	21615		
Accounts Payable	(804)	27957	
Net Cash from Operating Activities			60380
(B) Investment Activities			
Purchase of Plant Assets		(23000)	
Short-term investments		(12000)	
Net Cash Flow from Investing Activities			(35000)
(C) Financing Activities			
Dividends paid		(25000)	
Net Cash Flow from Financing Activities			(25000)
(D) Net Change in Cash			380
Cash at the Beginning of the year			6000
Cash at the End of the Year			6380

Illustration 3

Prepare a Cash Flow Statement from the following information under both Direct method and Indirect method:

Balance Sheet as on 31.12.2005

(Rs. in 000)

Liabilities	**2005 (Rs.)**	**2004 (Rs.)**	**Assets**	**2005 (Rs.)**	**2004 (Rs.)**
Share Capital	3,000	2,500	Cash and Bank balances	400	50
Reserves	6,820	2,760	Short-term investments	1,340	270
Long term debt	2,220	2,080	Sundry debtors	3,400	2,400
Sundry creditors	300	3,780	Interest receivable	200	—
Interest Payable	460	200	Inventories	1,800	3,900
Income Tax Payable	800	2,000	Long term investments	5,000	5,000
Accumulated depreciation	2,900	2,120	Fixed assets (cost)	4,360	3,820
	16,500	15,440		16,500	15,440

Profit and loss account for the period ending Dec. 31, 2005

(Rs. in 000)

	Rs.		**Rs.**
To Cost of Sales	52,000	By Sales	61,300
To Gross Profit	9,300		
	61,300		61,300

To Administrative and selling expenses	1820	By Gross Profit b/d	9,300
To Interest expense	800	By Dividend income	400
To Foreign exchange loss	80	By Interest income	600
To Depreciation	900		
To Net Profit (Before taxation and Extraordinary item)	6700		
	10,300		10,300
To Income Tax	600	By Net profit b/d	6,700
To Net Profit c/d	6460	By Insurance proceeds from earthquake settlement	360
	7,060		7,060

Additional information : (Figures are in Rs. 000)

1) An amount of Rs. 500 was raised from the issue of share capital and a further Rs. 500 was raised from long term borrowings.

2) Interest expense was Rs. 800 of which Rs. 340 was paid during the period. Rs. 200 relates to interest expense of the prior period was also paid during the period.

3) Dividends paid were Rs. 2,400.

4) Tax deducted at source on dividends received (which was included in the tax paid of Rs. 600 for the year) amounted to Rs. 80.

5) During the period, the enterprise acquired fixed assets paying Rs. 700.

6) Plant which costs Rs. 160 and accumulated depreciation of Rs. 120 was sold for Rs. 40.

7) Foreign exchange loss is due to change in exchange rates of short term investments.

Solution

Cash Flow Statement (Direct Method)

(Rs. in 000)

A)	**Cash Flow from Operating activities**	**2005 year**	
	Cash receipts from customers (1)	60,300	
	Less : Cash paid to suppliers and employees (2)	55,200	
	Cash generated from operations	5,100	
	Less : Income Tax Paid (3)	1,720	
	Cash Flow before extraordinary item	3,380	
	Add : Proceeds from earthquake settlement	360	
	Net cash from operating activities		3,740
B)	**Cash Flows from Investing activities**		
	Sale of Plant	40	
	Interest received (Rs. 600 – Rs. 200 Accrued interest)	400	
	Dividend received (Rs. 400 – Tax deducted at source Rs. 80)	320	
		760	
	Less :		
	Purchase of fixed assets	700	
	Net cash from Investing activities		60

C)	**Cash Flows from financing activities**			
	Issue of share capital		500	
	Long term borrowing		500	
			1000	
	Less : Repayment of long term debt (4)	360		
	Interest paid (5)	540		
	Dividend paid	2,400		
			3,300	
	Net cash used in financing activities			(—) 2300
	Net increase in cash and cash equivalents			1,500
	Add : Cash and cash equivalent at the beginning (Rs. 50 + Rs. 270 Short term Investments)			320
	Cash and cash equivalent at the end			1,820*

* [Rs. 400 + (Short term investments Rs. 1340 + Loss in exchange rate Rs. 80)]

Working Notes:

1)	**Cash receipts form customers**		(Rs. in 000)
	Sales		61,300
	Add : Sundry debtors at the beginning		2,400
			63,700
	Less : Sundry debtors at the end		3,400
			60,300
2)	**Cash paid to suppliers and employees**		(Rs. in 000)
	Cash of Sales		52,000
	Administrative and selling expenses		1,820
			53,820
	Add : Opening creditors	3,780	
	" Inventories at the end	1,800	5,580
			59,400
	Less : Creditors at the end	300	
	" Opening inventories	3,900	4,200
			55,200
3)	**Income tax paid**		(Rs. in 000)
	Tax paid (Including Tax deducted at source from dividends received)		600
	Add : Tax liability at the beginning		2,000
			2600
	Less : Tax liability at the end		800
			1,800

Out of Rs.1800, tax deducted at source on dividends received (Rs.80), is shown in 'Cash Flows from Investing Activities' and balance of Rs. 1720 is to be shown under 'cash flows from operating activities'.

4)	**Repayment of long term borrowings**	(Rs. in 000)
	Long term debt at the beginning	2,080
	Add : Long term debt made during the year	500
		2,580
	Less : Long term debt at the end	2,220
		360

5) **Interest Paid** (Rs. in 000)

Interest expense for the year	800
Add : Interest Payable at the beginning	200
	1,000
Less : Interest payable at the end	460
	540

Cash Flow Statement (Indirect Method)

(Rs. in 000)

			2005 year
Cash flows from operating activities			
Net Profit before taxation and extraordinary item			6,700
Adjustments for:			
+ Depreciation		900	
+ Foreign exchange loss		80	
+ Interest expense		800	
– Interest income	(–)	600	
– Dividend income	(–)	400	780
Operating Profit before Working Capital Changes			7480
(–) Increase in sundry debtors	(–)	1,000	
(+) Decrease in inventories		2,100	
(–) Decrease in sundry creditors	(–)	3,480	(–) 2,380
Cash Generated from Operations			5,100
(–) Income tax paid (Rs. 1800 – Tax deducted at source Rs. 80)			1,720
Cash flow before extraordinary item			3,380
Proceeds from earthquake settlement			360
Net Cash from Operating Activities			3,740
Cash flows from investing activities			
(–) Fixed assets purchased	(–)	700	
(+) Proceeds from sale of plant		40	
(+) Interest received (Interest income Rs. 600 – Accrued interest Rs. 200)		400	
(+) Dividend received (Rs. 400 – Tax deducted at source Rs. 80)		320	
Net Cash from Investing Activities			60
Cash flows from financing activities			
(+) Issue of additional capital		500	
(+) Proceeds from long term borrowings		500	
(–) Repayment of long term borrowings (Opening balance Rs. 2,080 + Borrowings during the year Rs. 500 – Balance at the end Rs. 2,220)	(–)	600	
(–) Interest paid	(–)	540	
(–) Dividend paid	(–)	2,400	(–) 2,300
Net Cash Used in Financing Activities			1,500
Cash & Cash equialent at the beginning (Rs. 50 + Rs. 270)			320
Cash and cash equivalent at the end			1,820

7.10 USES OF CASH FLOW STATEMENT

Cash flow statement is very useful to the financial management. It is used as a tool for financial analysis for short term planning.

The preparation of cash flow statement has several uses. The more important uses are as follows:

1) Changes in cash balance between two points of time and the contributing factors for such change are clearly revealed.

2) The cash flow statement explains the reasons for:

   i) the presence of very low cash balance inspite of huge operating profits: or

   ii) the presence of a higher cash balance inspite of a very low level of profits

3) Projected cash fow statements help the management in short-term planning and several other ways like:

   i) Determination of additional cash requirements during a given period and making timely arrangements

   ii) Identification of the size of surplus and the time for which such surplus funds are likely to be available

   iii) Judging the ability of the firm to repay/redeem debentures/preferences shares.

   iv) Examining the possibility of maintaining/increasing dividends

   v) Assessing the capability of finance, replacement of fixed assets

   vi) Assessing the capacity of the firm to finace expansion.

   vii) More efficient and effective management of cash flows.

7.11 DISTINCTION BETWEEN CASH FLOW ANALYSIS AND FUND FLOW ANALYSIS

Following are the major points of difference between cash flow analysis and fund flow analysis:

1) Fund flow analysis deals with the change in working capital position between two balance sheet dates, whereas the cash flow analysis is concerned with the change in cash position.

2) Cash flow analysis is more useful as a tool in short-term financial planning, whereas fund flow analysis is more useful in long-term financial planning.

3) An increase in current liability or decrease in current asset (other than cash) results in an increase in cash whereas such changes result in decrease in the net working capital. Similarly, a decrease in any current liability or an increase in current asset (other than cash) results in a decrease in cash, whereas such changes increase the net working capital.

4) Cash flow statement recognises 'cash basis of accounting' where as funds flow statement is based on accrual basis of accounting.

5) Cash flow analysis explains only the causes of cash variations, wheresas funds flow analysis discloses the causes of overall working capital variations.

Activity 6

1) Compute the changes in cash flow from operating activities of Infosys between Year 2001 & 2000 and 2002 & 2001.

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2) Compute the changes in profit before taxes and depreciation of Infosys between Year 2001 & 2000 and 2002 & 2001.

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3) Compare whether the profit changes are in line with the changes in cash flow from operating activities.

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4) Repeat the above two steps for few companies and write your findings.

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7.12 LET US SUM UP

Cash Flow Statement and cash flow analysis have assumed importance particularly when many companies have started adopting creative accounting and earnings management. Realising the needs of new users as well as others, regulating agencies have made reporting of cash flow statements mandatory. Cash flow statement is easy to understand and difficult to manipulate. It provides three important pieces of information on cash flow movements of the firm – how much cash is generated through operation, financing and how much cash is spent for investment? It gives a clear and real picture about the internal activities of the firm. There are two methods of preparation of cash flow statements, namely direct and indirect method. While direct method gives more details on cash flow from operating activities and also reader-friendly, indirect method is more accounting oriented and fails to provide any additional information. Unfortunately, many companies use indirect method though the accounting standards allow both methods. This indirectly shows the eagerness of management to withhold information unless it is required by the regulation. Fortunately, the final figure is adequate to get good insight though additional information will always be useful. Cash flow analysis are typically done by comparing the changes in cash flow from operating activities from period to

period with the changes in profit levels of the firm. Such comparison is useful to understand the quality of reported profit. Also, the cash flow from operating activities are used to compare whether they are sufficient to meet the liabilities of lenders and also contribute for further investments.

7.13 KEY WORDS

Cash Flow: Movement of cash i.e., cash in flow and cash outflow

Cash Flow Statement: Statement prepared to show the sources and uses of cash between the two balance sheets dates.

Cash from Operations: Net profit adjusted for changes in the current items in additional to the adjustments already made while ascertaining funds from operations.

7.14 TERMINAL QUESTIONS

1) How cash flow statement is different from income statement? What are the additional benefits to different users of accounting information from cash flow statement?

2) List down any four important accounting transactions that increase the profit but has no impact on cash flow statement.

3) How does cash flow statement differ from funds flow statement? What are the uses of cash flow statement?

4) How does cash flow analysis help the management in decision making?

5) What is a 'Cash Flow Statement'? Explain the techniques of preparing a cash flow statement.

6) A summary of Cash Flow Statement of Shaheed Industries Ltd. for the last few years is given below. The details of profit are also stated. Suppose you are an analyst working for a leading mutual fund in India prepare a small report on the performance of the company using these two pieces of information.

Summary of Cash Flow Statement of Shaheed Industries Ltd.

Year	2003	2002	2001	2000
Cash and Cash Equivalents at Beginning of the year	1,760.71	143.27	1,081.55	4,897.60
Cash from Operating Activities	6,642.31	7,523.00	4,748.08	1,630.55
Cash Used In Investing Activities	–6,575.53	–3,928.34	–2,423.89	–5,000.06
Cash Used In Financing Activities	–1,680.28	–1,977.22	–3,305.11	–446.54
Net Inc/(Dec) In Cash And Cash	–1,613.50	1,617.44	–980.92	–3,816.05
Cash and Cash Equivalents at end of the Year	147.21	1,760.71	100.63	1,081.55
Net Profit Before tax & Extraordinary Items	4,974.21	4,428.70	2,645.62	2,403.25
Depreciation	3,452.79	3,435.82	2,636.73	2,533.59

7) The following are the Balance Sheet of M/s. Rao Brother Private Ltd. as on March 2004 and 2005

Liabilities	2004 Rs.	2005 Rs.	Assets	2004 Rs.	2005 Rs.
Equity Shares	4,000	4,000	Fixed assets	4,100	4,000
12% Redeenable Preference shares	—	1,000	Less : Depreciation	1,100	1,500
				3,000	2,500
Profit and loss a/c	100	120	Sundry Debtors	2,000	2,400
General reserve	200	200	Stock	3,000	3,500
Debentures	600	700	Prepaid expenses	30	50
Creditors	1,200	1,100	Cash	120	350
Provision for taxation	800	1,000			
Bank overdraft	1,250	680			
	8,150	8,800		8,150	8,800

Your are required to prepare a Cash Flow Statement.

(**Ans.** Cash from Operation Rs. 400, Sources Rs.1,600, Applications Rs. 800)

8) ABC company supplies you the following Balance Sheets on 31 December:

Liabilities	2004 Rs.	2005 Rs.	Assets	2004 Rs.	2005 Rs.
Share capital	14,0000	148,000	Bank balance	18,000	15,600
Bonds	24,000	12,000	Receivable	29,800	35,400
Accounts Bills payable	20,720	23,680	Inventories	98,400	85,400
Provision for Doubtful debts	1,400	1,600	Land	40,000	60,000
			Goodwill	20,000	10,000
Reserves & surplus	20,080	21,120			
	206,200	206,400		206,200	206,400

Following additional information has also been supplied to you :

i)Dividends amounting to Rs. 7000 were paid during the year 2004.

ii) Land was purchased for Rs. 20,000.

iii) Rs. 10,000 were written off for Goodwill during the year.

iv) Bonds of Rs. 12,000 were paid during the course of the year. You are required to prepare a Cash Flow Statement.

(**Ans.** Cash from Operations Rs. 28600, Sources Rs. 36,600, Applications 39,000)

9) From the following Balance Sheets of Alfa Ltd., prepare Cash Flow Statement under both the methods:

Liabilities	2004	2005	Assets	2004	2005
Equity Share Capital	150,000	2,00,000	Fixed Assets	2,00,000	275,000
Profit & Loss A/c	42,500	55,000	Stock	1,00,000	112,500
Bank Loan	50,000	37,500	Debtors	1,05,000	95,000
Accumulated Depreciation	40,000	67,500	Bill Receivable	40,000	55,000
Creditors	155,000	147,500	Bank	15,000	–
Proposed dividend	22,500	30,000			
	4,60,000	5,37,500		4,60,000	5,37,500

Additional information A piece of machinery costing Rs. 30,000 on which accumulated depreciation was Rs. 7500 was sold for Rs. 15,000.

(**Ans.** Net Decrease in Cash Rs. 15,000)

10) The Profit and Loss Account of an enterprise for the year ended 31st March, 2004 stood as follows :

		Rs.			Rs.
To Opening Stock of Materials		1,00,000	By Sales		13,80,000
To Purchase of Materials		9,30,000	By Dividend Received		30,000
To Wages	200,000		Bt Commission Accrued		10,000
Add : Outstanding Wages	50,000	2,50,000	By Profit on Sale of Building:		
To Salaries	80,000		Book value	5,00,000	
Add Outstanding Salaries	40,000		Selling Price	6,20,000	1,20,000
	1,20,000		By Closing Stock		1,30,000
Less : Prepaid Salaries	5,000	1,15,000			
To Office Expenses		60,000			
To Selling & Distribution Expenses		40,000			
To Depreciation		55,000			
To Preliminary Expenses (written off)		12,000			
To Goodwill (written off)		20,000			
To Net Profit		88,000			
		16,70,000			16,70,000

Calculate the amount of Cash generated from Operating activities under both the methods as per AS-3 (Ans: Rs. 70,000)

11) From the following information , you are required to compute Cash Flow from Operating Activities under (i) Direct Method and (ii) Indirect Method.

Profit & Loss Account

for the year ended 31st March, 2005

Particulars	Rs.	Particulars	Rs.
To Cost of Goods Sold	2,00,000	By Sales (including cash sales Rs. 50,000)	2,50,000
To Office Expenses	10,000	By Profit on Sales of Land	10,000
To Selling and Distribution Exp.	3,000	By Interest Received	12,000
To Depreciation	4,000		
To Loss on Sale of Plant	2,000		
To Goodwill written off	4,000		
To Income Tax paid	9,000		
To Net Profit	40,000		
	2,72,000		2,72,000

The following is the position of Current Assets and Current Liabilities :

Particulars	As on 31st March, 2004	As on 31st March, 2005
Stock	20,000	18,000
Debtors	13,000	10,000
Bills Receivable	8,000	9,000
Creditors	9,000	15,000
Bills Payable	7,000	6,000
Outstanding Office Expenses	3,000	5,000

(Ans: Cash flow from operating activities: Rs. 39,000
Cash Receipt from customers : Rs. 252,000
Cash paid to suppliers and Employees : Rs. 2,04,000)

12) From the following balance sheets prepare a cash flow statement.

Liabilities	31.12.2003	31.12.2004	Assets	31.12.2003	31.12.2004
Share Capital	2,00,000	250,000	Fixed Assets:		
Reserves	100,000	120,000	Land	300,000	350,000
Profit & Loss A/c	1,20,000	1,50,000	Machinery	2,00,000	2,40,000
Debentures	90,000	1,00,000	Current Assets:		
Accumulated			Inventory	1,00,000	1,30,000
Depreciation	60,000	80,000	Debtors	70,000	50,000
Current Liabilities:			Cash	40,000	60,000
Creditors	40,000	45,000			
Bills Payable	65,000	40,000			
Expenses Outstanding	35,000	45,000			
	7,10,000	8,30,000		7,10,000	8,30,000

Note: Machinery costing Rs. 40,000 (accunulated depreciation Rs. 10,000) was sold for Rs. 35,000

(Ans. : Cash from Operation Rs. 55,000)

13) Extracts of Balance Sheets of Messers Beta Company Ltd. are given below:

Liabilities	31.12.03 Rs.	31.12.04 Rs.	Assets	31.12.03 Rs.	31.12.04 Rs.
Share Capital	50,000	60,000	Fixed Assets:	1,50,000	2,44,000
			Stock in Hand	3,800	6,600
Creditors	54,000	70,000	Debtors	76,000	67,000
			Cash	36,000	13,750
			Bills Receivable	17,500	19,000

Additional information

The profits for the year ended 31.12.2004 amounted to Rs. 48,000 before charging depreciation & taxation. During the year 500 share were issued at Rs. 20 each. Interim dividend paid during the year Rs. 6,950. Prepare cash flow statement.

(Answer : Cash flow from operation Rs. 68,700)

14) The following are the summarised Balance Sheets of Wye Ltd. as on 31st March, 2002 and 2003.

Liabilities	2002 Rs.	2003 Rs.	Assets	2002 Rs.	2003 Rs.
Share Capital:			Fixed Assets	4,10,000	4,00,000
Preference Capital	-	1,00,000	Less: Depreciation	1,10,000	1,50,000
Equity Capital	4,00,000	4,00,000		3,00,000	2,50,000
General Reserve	20,000	20,000	Debtors	2,00,000	2,40,000
Profit & Loss A/c	`10,000	12,000	Stock	`3,00,000	3,50,000
14% Debentures	60,000	70,000	Prepaid Expenses	3,000	5,000
Creditors	1,20,000	1,10,000	Cash	12,000	35,000
Provision for Taxation	30,000	42,000			
Proposed Dividends	50,000	58,000			
Bank Overdraft	1,25,000	68,000			
	8,15,000	8,80,000		8,15,000	8,80,000

You are required to prepare a Statement of Cash Flow.
[Cash from Operation Rs. 40,000; Cash Inflow Rs. 1,60,000
Cash Outflow Rs. 1,37,000]
[Note. Provision for Tax and Proposed Dividend are treated as Non-Current Liability.]

15) From the following Balance Sheets of Exe Ltd., you are required to prepare a Cash Flow Statement:

Liabilities	2004 Rs.	2005 Rs.	Assets	2004 Rs.	2005 Rs.
Equity Share Capital	3,00,000	4,00,000	Goodwill	1,15,000	90,000
10% Preference			Buiding	2,00,000	1,70,000
Share Capital	1,50,000	1,00,000	Plant	80,000	2,00,000
General Reserve	40,000	70,000	Debtors	170,000	2,00,000
Profit & 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
Creditors	55,000	83,000	Cash in hand	15,000	18,000
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:

i) Depreciation on Plant Rs.10,000

ii) Gain on Sale of Building Rs. 20,000

[Fund from Operation , Rs. 1,63,000, Cash from Operation Rs. 1,15,000 Cash Inflow Rs. 2,80,000; Cash Outflow Rs. 2,62,000]

16) You are given the following Balance Sheets of International company Ltd., for the years ending 31st December, 2002 and 2003.You are required to prepare a Cash Flow Statement under i) Direct Method and ii) Indirect Method for the year ended 31st December, 2003.

Liabilities	2002 Rs.	2003 Rs.	Assest	2002 Rs.	2003 Rs.
Equity Share Capital	30,000	30,000	Land	12,000	10,800
General Reserve	5,200	5,400	Building	11,100	10,800
Profit & Loss A/c	3,800	3,900	Short Term Investments	3,000	3,300
Accounts Payable	2,400	1,620	Inventories	9,000	7,020
Short Term Loan	360	240	Account Receivable	6,000	6,660
Provision for Taxation	4,800	5,400	Bank Balance	1,980	5,160
Provision for Bad Debts	120	180	Dicount on Issue of share	3,600	3,000
	46,680	46,740		46,680	46,740

Following additional information has also been supplied to you:

i) A piece of land has been sold for Rs. 2,400 at a profit of 100%

ii) Depreciation of Rs. 2,100 has been charged on Building.

iii) Dividend paid during the year Rs. 4,500.

[**Ans :** Net increase in cash Rs. 3480 , cash balance as on 31-12-2003, Rs 8460]

17) Following are the comparative Balance Sheets of ABC Company Ltd. for the years ended 31st December , 2002 and 31st December, 2003:

Liabilities	2002 Rs.	2003 Rs.	Assest	2002 Rs.	2003 Rs.
Equity Share Capital	4,00,000	6,00,000	Machinery (at cost)	2,00,000	2,60,000
Profit & Loss A/c	47,000	1,04,000	Computer	_	2,00,000
Securities Premium	_	10,000	Land	20,000	20,000
Debentures	80,000	70,000	Cash at Bank	86,000	1,26,000
Provision for Doubtful	4,000	6,000	Prepaid Expenses	4,000	4,000
Accumulated Depreciation	30,000	51,000	Debtors	1,60,000	1,80,000
Creditors	66,000	80,000	Stock	64,000	80,000
Outstanding Expenses	7,000	9,000	Investments	1,00,000	60,000
	6,34,000	9,30,000		6,34,000	9,30,000

Additional Information :

i) Dividend paid @ 8% on share capital during 2003.

ii) Investments costing Rs. 40,000 were sold in 2003 for Rs. 50,000.

iii) Machinery costing Rs. 18,000 on which Rs. 2,000 depreciation has been accumulated , was sold for Rs. 12,000 in the year 2003.

Prepare Cash Flow Statement for the year 2003 as per AS -3

[Ans. Net Increase in Cash and Cash Equivalent : Rs. 40,000]

18) On the basis of the information given in the Balance Sheet of ABC Ltd. prepare a Cash Flow Statement

Liabilities	2003	2004	Assets	2003	2004
Equity Share Capital	1,50,000	2,00,000	Goodwill	35,000	10,000
12% Debentures	50,000	75,000	Land and Buiding	1,20,000	1,75,000
10% Preference Share Capital	40,000	25,000	Machinery	75,000	1,00,000
General Reserve	30,000	37,500	Debtors	50,000	70,000
Creditors	47,500	42,500	Stock	37,500	25,000
Bills Payable	10,000	20,000	Cash	10,000	20,000
	3,27,500	4,00,000		327,500	4,00,000

[**Ans:** Net increase in cash : Rs. 10,000]

19) From the following Balance Sheet of M/s Electronics Ltd. as on 31.12.2003 and 2004, prepare a Cash Flow Statement'

Liabilities	2003 Rs.	2004 Rs.	Assets	2003 Rs.	2004 Rs.
Equity Share Capital	1,00,000	1,50,000	Goodwill	10,000	5,000
9% Redeemable Preference			Building	1,50,000	2,20,000
Share Capital	50,000	40,000	Plant	80,000	1,00,000
12% Debentures	51,000	69,000	Stock	60,000	75,000
General Reserve	30,000	20,000	Debtors	20,000	17,000
P & L A/c	50,000	70,000	Bills Receivable	8,000	9,000
12% Public Deposits	80,000	1,20,000	Accrued Income	10,000	6,000
Creditors	8,000	10,000	Prepaid Expenses	—	2,000
Bills Payable	6,000	4,000	Cash	40,000	50,000
Outstanding Expenses	3,000	1,000			
	3,78,000	4,84,000		3,78,000	4,84,000

[Ans: Net increase in cash : Rs. 10,000]

AS-3 statement issued by ICAI has also contains an exhaustive illustration on Cash Flow Statements. Students may visit the following link to see the illustration. http://www.icai.org/common/index.html

Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.