7.3 CASH FLOW ANALYSIS

According to Accounting Standard - 3 (Revised) an enterprise should prepare a Cash Flow Statement and should present it for each period with financial statements prepared. AS-3 (Revised) has also given the meaning of the words cash, cash equivalent and cash flows.

(i) **Cash:** This includes cash on hand and demand deposits with banks.

(ii) **Cash equivalents:** Cash Equivalents are **short term**, **highly liquid** investments that are readily convertible into cash. This includes purely short term and highly liquid investments which are readily convertible into cash and which are 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.

(iii) **Cash flows:** This includes inflows and outflows of cash and cash equivalents. If the effect of transaction results in the increase of cash and its equivalents, it is called an inflow (source) and if it results in the decrease of total cash, it is known as outflow (use of cash).

Classification of Cash Flows

According to AS-3 (Revised) cash flows are classified into three main categories:

A. Cash flows from **Operating** Activities.

B. Cash flows from **Investing** Activities.

C. Cash flows from **Financing** Activities.

A. Cash flows from Operating Activities: Operating activities are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities. The following are the important operating activities:

(i) Cash receipts from the **sale** of goods and the rendering of services.

(ii) Cash receipts from **royalties, fees**, commissions and other revenue.

(iii) Cash payments to **suppliers** for goods and services.

(iv) Cash payments to and on behalf of **employees**.

(v) Cash receipts and cash payments of an **insurance** enterprise for premiums and claims, annuities and other policy benefits,

(vi) Cash payments or refunds of income **taxes** unless they can be specifically identified with financing and investing activities,

(vii) Cash receipts and payments relating in future contracts, forward contracts, option contracts and swap contracts when the contracts **(Derivatives)** are held for dealing or trading purposes.

B. Cash flows from Investing Activities: Examples of cash flows arising from Investing Activities are

(i) Cash payments to acquire **fixed assets** (including intangibles). These payments include those relating to capitalised research & development costs and self constructed fixed assets.

(ii) Cash receipts from disposal of fixed assets (including intangibles).

(iii) Cash payments to acquire **shares, warrants, or debt instruments** of other enterprises and interests in joint ventures.

(iv) Cash receipts from disposal of shares, warrants, or debt instruments of other enterprises and interests in joint venture.

(v) Cash **advances and loans made to third parties** (other than advances and loans made by a financial enterprise).

(vi) Cash receipts from the repayment of advances and loans made to third parties (other than advances and loans of a financial enterprise).

C. Cash flows from financing activities: 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 company) and borrowing of the enterprise.

Examples of cash flows arising from financing activities are

(i) Cash proceeds from issuing **shares** or other similar instruments.

(ii) Cash proceeds from issuing **debentures loans, notes**, bonds and other short-or long-term borrowings and

(iii) Cash repayments of amounts borrowed such as redemption of debentures, bonds, preference shares.

Treatment of some typical items

AS - 3 (Revised) has also provided for the treatment of cash flows from some peculiar items as discussed below :

Extraordinary Items: The cash flows associated with extraordinary items should be classified as arising from <u>operating, investing or financing</u> activities as appropriate and **separately disclosed** in the Cash Flows Statement to enable users to understand their nature and effect on the present and future cash flows of the enterprise.

Interest and Dividends: cash flows arising from **interest and Dividend** paid should be classified as cash flows from <u>financing activities</u> while **interest and dividends received** should be classified as cash flows from <u>investing activities</u>.

Taxes on income: Cash flows arising from taxes on income should be **separately disclosed** and should be classified as cash flows from <u>operating activities</u> unless they can be specifically identified with <u>financing and investing activities</u>.

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

Foreign currency cash flows: Cash flows arising from transactions in a foreign currency should be recorded in an enterprise's reporting currency by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the cash flow. 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**.

Non-cash transactions: 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.

Examples of non-cash transactions are:

(i) The acquisition of assets by assuming directly related activities.

(ii) The acquisition of an enterprise by means of issue of shares; and

(iii) The conversion of debt to equity.

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.

Methods of Calculating Cashflows (Used in) Operating Activities

There are two methods of reporting cash flows from operating activities namely (1) Direct Method and (2) Indirect Method.

A. The Direct Method: Under the direct method, cash receipts (inflows) from operating revenues and cash payments (outflows) for operating expenses are calculated to arrive at cash flows from operating activities. The difference between the cash receipts and cash payments is the net cash flow provided by (or used in) operating activities. The following are the examples of cash receipts and cash payments (called cash flows) resulting from operating activities:

(a) Cash receipts from the **sale** of goods and the rendering of services.

(b) Cash receipts from **royalties**, fees commissions and other revenues

(c) Cash payment to **suppliers** for goods and services

(d) Cash payment to and on behalf of **employees**.

(e) Cash receipts and cash payment of an **insurance** enterprise for premiums and claims annuities and other policy benefits.

(f) Cash payments or refund of **income taxes** unless they can be specifically indentified with financing and investing activities.

Format of Cash Flow Statement: AS-3 (Revised) has not provided any specific format for preparing a Cash Flows Statement. The Cash Flow Statement should report cash flows during the period classified by operating, investing and financing activities; a widely used format of Cash Flow Statement is given below:

Cash Flow Statement (for the year ended.....)

Particulars	(₹)	(₹)
Cash Flows from Operating activities		
Cash receipts from customers	xxx	
Cash paid to suppliers and employees and for overheads	(xxx)	
Cash generated from operations	xxx	
Income tax paid	(xx)	
Cash flow before extraordinary items	xxx	
Extraordinary items	xxx	
Net cash from (used in) Operating activities		xxx
(Or)		
Net profit before tax and extraordinary items	xxx	
Adjustments for non-cash and non-operating items		
(List of individual items such as depreciation, foreign exchange loss, loss on sale of fixed	xxx	
Operating profit before working capital changes	xxx	
Adjustments for changes in current assets and current liabilities		
(List of individual items)	xxx	
Cash generated from (used in) operations before tax	xxx	
Income tax paid	xxx	
Cash flow before extraordinary items	xxx	
Extraordinary items (such as refund of tax)	xxx	
Net Cash from (used in) Operating activities		xxx
Cash Flows from investing activities		
Individual items of cash inflows and outflows from financing activities	xxx	
(such as purchase/sale of fixed assets, purchase or sale of investments, interest	xxx	
Net cash from (used in) investing activities		xxx
Cash Flows from Financing Activities		
Individual items of cash inflows and outflows from financing activities	xxx	
(such as) proceeds from issue of shares, long-term borrowings, repayments of longterm	xxx	xxx
Net increase (decrease) in cash and cash equivalents		xxx
Cash and cash equivalents at the beginning of the period		xxx
Cash and cash equivalents at the end of the period		xxx

B. The Indirect Method: Under the indirect method, the net cash flow from operating activities is determined by adjusting net profit or loss for the effect of:

(a) Non-cash items such as depreciation, provisions, deferred taxes, and unrealised foreign exchange gains and losses;

(b) Changes during the period in inventories and operating receivables and payables.

(c) All other items for which the cash effects are investing or financing cash flows.

The indirect method is also called reconciliation method as it involves reconciliation of net profit or loss as given in the Profit and Loss Account and the net cash flow from operating activities as shown in the Cash Flow Statement. In other words, net profit or losses adjusted for non-cash and non-operating items which may have been debited or credited to Profit and Loss Account as follows.

Calculation of Cash Flow from Operating Activities

Particulars	(₹)	(₹)
Net profit before tax and extraordinary items		xxx
Add : Non-cash and non-operating items which have already been debited to P.L.		
(a) Depreciation	xxx	
(b) Transfer to reserves and provisions	xxx	
(c) Good will written off	xxx	
(d) Preliminary expenses written off	xxx	
(e) Other intangible assets written off such as discount or loss on issue of shares /	xxx	
(f) Loss on sale or disposal of fixed assets	xxx	
(g) Loss on sale of investments	xxx	
(h) Foreign exchange loss	xxx	xxx
Less : Non-cash and non-operating items which have already been credited to P.L.		xxx
(a) Gain on sale of fixed assets	xxx	
(b) Profit on sale of investments	xxx	
(c) Income from interest or dividends on investments	xxx	
(d) Appreciation	xxx	
(e) Reserves written back	xxx	
(f) Foreign exchange gain	xxx	xxx
Operating Profit Before Working Capital Changes		
Adjustments for changes in current operating assets and liabilities:		
Add : Decrease in Accounts of Current Operating Assets (except cash and cash		
Decrease in trade debts	xxx	
Decrease in bills receivables	xxx	
Decrease in inventories / stock-in-trade	xxx	
Decrease in prepaid expenses etc.	xxx	
Add : Increase in accounts of current operating liabilities (except Bank overdraft) such		
Increase in creditors	xxx	
Increase in bills payable	xxx	
Increase in outstanding expenses	xxx	Xxx
		Xxxx
Less : Increase in accounts of current operating assets (as stated above)		Xxx
		xxx
Less : Decrease in accounts of current operating liabilities (as stated above)		xxx

Cash generated from (used in) operations before tax		xxx
Less : Income tax paid		xxx
Cash flows before extraordinary items		xxx
Add / Less : Extraordinary items if any		xxx
Net cash flow from (used in) operating activities		xxx

ILLUSTRATIONS – CASH FLOW STATEMENT

Illustration

From the information contained in Income Statement and Balance Sheet of 'A' Ltd, prepare Cash Flow Statement.

Income Statement for the year ended March 31, 2016

		(₹)
Net Sales	(A)	2,52,00,000
Less:		
Cash cost of sales		1,98,00,000
Depreciation		6,00,000
Salaries and Wages		24,00,000
Operating Expenses		8,00,000
Provision for Taxation		8,80,000
	(B)	2,44,80,000
Net Operating Profit (A – B)		7,20,000
Non-recurring Income – Profits on sale of equipment		1,20,000
		8,40,000
Retained earnings and Profits brought forward		15,18,000
		23,58,000
Dividends declared and paid during the year		7,20,000
Profit and Loss A/c balance as on March 31, 2016		16,38,000

Balance Sheet as on

	(₹)	(₹)
Assets	**March 31, 2015**	**March 31, 2016**
Fixed Assets:		
Land	4,80,000	9,60,000
Buildings and Equipment	36,00,000	57,60,000
Current Assets:		
Cash	6,00,000	7,20,000
Debtors	16,80,000	18,60,000
Stock	26,40,000	9,60,000
Advances	78,000	90,000
	90,78,000	**1,03,50,000**

Balance Sheet as on

	(₹)	(₹)
Liabilities and Equity	**March 31, 2015**	**March 31, 2016**
Share Capital	36,00,000	44,40,000
Surplus in Profit and Loss A/c	15,18,000	16,38,000
Sundry Creditors	24,00,000	23,40,000
Outstanding Expenses	2,40,000	4,80,000
Income – Tax payable	1,20,000	1,32,000
Accumulated Depreciation on Buildings and Equipment	12,00,000	13,20,000
	90,78,000	**1,03,50,000**

The original cost of equipment sold during the year 2015-16 was ₹ 7,20,000.

Solution:

Cash Flow Statement of A Ltd. for the year ended 31st March 2016

(A) Cash flow from Operating Activity:	(₹)	(₹)
Cash receipt from customers	2,50,20,000	
Less: Cash paid to supplier & employees	2,11,52,000	
Cash generated from operation	38,68,000	
Less: Income tax paid	(8,68,000)	
Net cash from operating activity		30,00,000

(B) Cash flow from Investing Activity:		
Purchase of land	(4,80,000)	
Purchase of building & equipment	(28,80,000)	
Sale of equipment	3,60,000	
Net cash used in Investing activity		(30,00,000)
(C) Cash flow from Financing Activity:		
Issue of share capital	8,40,000	
Dividends paid	(7,20,000)	
Net cash from financing activity		1,20,000
Net increase in cash & cash equivalent		1,20,000
Cash & Cash equivalent at beginning		6,00,000
Cash & Cash equivalent at the end		7,20,000

Working Notes:

1. **Cash receipt from customers**

   Opening + credit sales – Receipts = Closing Balance

   16.8 + 252 – Receipts = 18.6

   16.8+252-18.6=Receipts

   250.2 = Receipts

2. **Income tax paid**

	(₹)
Tax payable at beginning	1,20,000
Add: Provision for taxation	8,80,000
	10,00,000
Less: Tax payable at the end	1,32,000
Tax paid during the year	8,68,000

3. **Cash paid to supplier & employee**

	(₹)	(₹)
Cost of goods sold		1,98,00,000
Add: Operating expenses		8,00,000
Salary and wages		24,00,000
		2,30,00,000
Add: Creditor at the beginning	24,00,000	
Stock at the end	9,60,000	

Advance at the end	90,000	
Outstanding exp. at the beginning	2,40,000	36,90,000
		2,66,90,000
Less: Creditors at the end	23,40,000	
Stock at the beginning	26,40,000	
Advance at the beginning	78,000	
Outstanding expenses at the end	4,80,000	55,38,000
Total Cash Paid		**2,11,52,000**

Opening stock + Purchase – Closing Stock = Cost of good sold
26.4 + Purchase – 9.6 = 198
Purchase = 198 + 9.6 – 26.4 = 181.2

Opening creditors + Credit Purchase – Payments = Closing Creditors
24 + 181.2 – Payments = 23.4
24 + 181.2 – 23.4 = Payments
Payments = 181.8

Salary expenses + Closing prepaid – Opening prepaid = Salary Paid
24 + 0.90 – 0.78 = 24.12

Expenses - Closing outstanding + Opening outstanding = Expenses paid
8 - 4.8 +2.4 = 5.6

Total cash expenses = Creditors payment + Salary + Expenses
= 181.8 + 24.12 + 5.6 = 211.52

4. Accumulated depreciation on equipment sold

	(₹)
Accumulated depreciation at beginning	12,00,000
Add: Depreciation for the year	6,00,000
	18,00,000
Less: Accumulated depreciation at the end	13,20,000
Accumulated depreciation on equipment sold	**4,80,000**

5. Sale price of equipment

6. Purchase of building and equipments

	(₹)
Opening balance	36,00,000

Less: Cost of equipment sold	7,20,000
	28,80,000
Balance at end	57,60,000
Purchase during the year	**28,80,000**

Illustration

The Balance Sheet of JK Limited as on 31st March, 2015 and 31st March, 2016 are given below:

Balance Sheet as on

(₹ '000')

Liabilities	31.03.15	31.03.16	Assets	31.03.15	31.03.16
Share Capital	1,440	1,920	Fixed Assets	3,840	4,560
Capital Reserve	--	48	Less: Depreciation	1,104	1,392
General Reserve	816	960	Net Fixed Asset	2,736	3,168
Profit and Loss A/c	288	360	Investment	480	384
9% Debenture	960	672	Cash	210	312
Current Liabilities	576	624	Other Current Assets		
Proposed Dividend	144	174	(including Stock)	1,134	1,272
Provision for Tax	432	408	Preliminary Expenses	96	48
Unpaid Dividend	--	18			
	4,656	**5,184**		**4,656**	**5,184**

Additional Information:

1. During the year 2015-2016, Fixed Assets with a book value of ₹2,40,000 (accumulated depreciation ₹ 84,000) was sold for ₹ 1,20,000.
2. Provided ₹ 4,20,000 as depreciation.
3. Some investments are sold at a profit of ₹48,000 and profit was credited to Capital Reserve.
4. It decided that stocks be valued at cost, whereas previously the practice was to value stock at cost less 10 per cent. The stock was ₹ 2,59,200 as on 31.03.15. The stock as on 31.03.16 was correctly valued at ₹ 3,60,000.
5. It decided to write off Fixed Assets costing ₹60,000 on which depreciation amounting to ₹ 48,000 has been provided.
6. Debentures are redeemed at ₹ 105.

Required:

Prepare a Cash Flow Statement.

Solution:

Cash Flow Statement (as on 31st March, 2016)

		(₹)	(₹)	(₹)
1.	**Cash flows from Operating Activities**			
	Profit and Loss A/c [3,60,000 -(2,88,000 + 28,800)]			43,200
	Adjustments:			
	Increase in General Reserve	1,44,000		
	Depreciation	4,20,000		
	Provision for Tax	4,08,000		
	Loss on Sale of Machine	36,000		
	Premium on Redemption of debenture	14,400		
	Proposed Dividend	1,74,000		
	Preliminary Exp written off	48,000		
	Fixed Assets written off	12,000		12,56,400
	Funds from operation			12,99,600
	Increase in Sundry Creditors			48,000
	Increase in Current Assets [12,72,000 -(11,34,000 + 28,800)]			(1,09,200)
	Cash before Tax			12,38,400
	Tax paid			4,32,000
	Net Cash from operating activities			8,06,400
2.	**Cash from Investing Activities**			
	Purchase of fixed assets		(10,20,000)	
	Sale of Investment		1,44,000	
	Sale of Fixed Assets		1,20,000	(7,56,000)
3.	**Cash from Financing Activities**			
	Issue of Share Capital		4,80,000	
	Redemption of Debenture		(3,02,400)	
	Dividend paid		(1,26,000)	51,600
Net increase in Cash and Cash equivalents				1,02,000
Opening Cash and Cash equivalents				2,10,000
Closing Cash				3,12,000

Working Notes:

Fixed Assets Account

Dr. **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance b/d	27,36,000	By Cash	1,20,000
To Purchases (balancing figure)	10,20,000	By Loss on sales	36,000
		By Depreciation	4,20,000
		By Assets written off	12,000
		By Balance c/d	31,68,000
	37,56,000		37,56,000

Depreciation Account

Dr. **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Fixed Assets (on sales)	84,000	By Balance b/d	11,04,000
To Fixed Assets w/o	48,000	By Profit and Loss A/c	4,20,000
To Balance c/d	13,92,000		
	15,24,000		15,24,000

Differences between Funds Flow Statement and Cash Flow Statement

The following are the main differences between a Funds Flow Statement and a Cash Flow Statement:-

Funds Flow Statement	Cash Flow Statement
1. Funds Flow Statement reveals the change in **working capital** between two Balance Sheet dates	Cash Flow Statement reveals the changes in **cash** position between two balance sheet dates.
2. Funds Flow Statement is based on accounting	Cash Flow Statement is based on cash basis of accounting
3. In the case of Funds Flow Statement a **schedule of changes in working capital** is prepared.	No such schedule of changes in working capital is prepared for a Cash Flow Statement.
4. Funds Flow Statement is useful in planning, Intermediate and **long term** financing.	Cash Flow Statement as a tool of financial analysis is more useful for **short-term** analysis and cash planning.
5. Funds Flow Statement deals with all components of working capital.	Cash Flow Statement deals only with cash and cash equivalents.
6. Funds Flow Statement reveals the **sources and application of funds**. The difference represents net increase or decrease in working capital.	Cash Flow Statement is prepared by taking into consideration the inflows and outflows in terms of **operating, investing and financing activities**. The net difference represents the net increase or decrease in cash and cash equivalents.

ILLUSTRATIONS – FUND FLOW STATEMENT

Illustration

From the following Balance Sheet of PKJ Ltd., Prepare Funds Flow Statement for 2016.

₹ '000

Liabilities	31-3-15	31-3-16	Assets	31-3-15	31-3-16
Equity Share Capital	150	200	Goodwill	50	40
9% Redeemable Preference Share	75	50	Land & Buildings	100	85
Capital Reserve	—	10	Plant & Machinery	40	100
General Reserve	20	25	Investments	10	15
Profit & Loss Account	15	24	Sundry Debtors	70	85
Proposed Dividend	21	25	Stock	39	55
Sundry Creditors	13	24	Bills Receivable	10	15
Bills Payable	10	8	Cash in hand	7	5
Liability for Expenses	15	18	Cash at bank	5	4
Provision for tax	20	25	Preliminary Exp.	8	5
	339	**409**		**339**	**409**

Additional information:

1. A part of land was sold out in 2016, and the profit was credited to Capital Reserve.
2. A machine has been sold for ₹5,000 (written down value of the machinery was ₹6,000). Depreciation of ₹5,000 was charged on plant in 2016.
3. An interim dividend of ₹10,000 has been paid in 2016.
4. An Amount of ₹1,000 has been received as dividend on investment in 2016.

Solution:

Funds flow Statement

Sources	(₹ '000)	**Application**	(₹ '000)
Funds from Operation	67	Investment Purchased	5
Sale proceed of Plant	5	Increase in Working Capital	16
Sale proceed of Land	25	Purchase of Plant & Machinery	71
Issue of Equity Share Capital	50	Redemption of Preference Share	25
Dividend on Investments received	1	Proposed Dividend for last year	21
		Interim dividend paid	10
	148		**148**

Working Note 1:

1. Calculation of changes in Working Capital:

	Amount (₹) in '000	
Current Asset	31-3-15	31-3-16
Debtors	70	85
Stock	39	55
B/R	10	15
Cash in hand	7	5
Cash at bank	5	4
A: Total Current Assets	**131**	**164**
	Amount (₹) in '000	
Current Liabilities	31-3-15	31-3-16
Creditors	13	24
B/P	10	8
Liabilities for exp.	15	18
Provision for Tax	20	25
B: Total Current Liabilities	**58**	**75**
Working capital (A-B)	**73**	**89**

Increase in working capital 89 – 73 = 16

2. Calculation of Fixed assets purchase during the year

Dr. **Plant and Machinery A/c** ***Cr.***

Particulars	(₹ '000)	Particulars	(₹ '000)
To Balance b/d	40	By Bank – sale proceeds	5
To Bank – Purchases (Bal. fig.)	*71*	By P & L-Loss	1
		By Depreciation	5
		By Balance C/f	100
	111		111

Dr. **Land and Building A/c** ***Cr.***

Particulars	(₹ '000)	Particulars	(₹ '000)
To Balance b/d	100	By Bank (Bal. fig.)	25
To Profit-Transfer to C/R	10	By balance c/f	85
	110		110

3. Calculation of Funds from Operation

Dr. **P& L Adjustment A/c** ***Cr.***

Particulars	(₹ '000)	Particulars	(₹ '000)
To Depreciation	5	By balance b/d	15
To Loss on sale of machinery	1	By Dividend Received	1
To Interim Dividend	10		
To Transfer to G/R	5		
To Proposed Dividend	25		
To Goodwill written off	10		
To Preliminary exp. written off	3		
To Closing balance	24	Funds from Operation (Bal. fig.)	67
	83		83