

## CHAPTER 5

### Solved Problems

**P.5.7** The chief executive of a plastic manufacturing company has reviewed the annual financial statements for the current year and is unable to determine from a reading of the balance sheet the reasons for the changes in cash during the year. He asks you for assistance and presents the following balance sheets of the Hypothetical Ltd.

<i>Particulars</i>	<i>Previous year March 31</i>	<i>Current year March 31</i>	<i>Increase (Decreases)</i>
<b>Assets:</b>			
Goodwill	Rs 1,00,000	(Nil)	Rs (1,00,000)
Buildings	2,80,000	Rs 4,05,000	1,25,000
Land	75,000	70,000	(5,000)
Machinery	1,00,000	1,65,000	65,000
Tools	35,000	20,000	(15,000)
Trade investments	7,500	9,000	1,500
Inventories	1,09,000	1,05,000	(4,000)
Sundry debtors	46,000	90,000	44,000
Bills receivable	13,500	10,500	(3,000)
Cash in hand	4,500	1,000	(3,500)
Unexpired insurance	700	600	(100)
Unamortised discount on debentures	1,250	1,050	(200)
	7,72,450	8,77,150	1,04,700
<b>Liabilities:</b>			
Equity share capital	2,00,000	3,50,000	1,50,000
Debentures	50,000	75,000	25,000
Sundry creditors	26,000	29,000	3,000
Bank overdraft	—	4,000	4,000
Bills payable	5,000	4,500	(500)
Bank loans (short-term)	3,400	750	(2,650)
Accrued taxes	1,500	2,500	1,000
Accrued interest	3,000	5,000	2,000
Allowance for doubtful accounts	1,150	2,250	1,100
Accumulated depreciation	90,500	1,35,600	45,100
Retained earnings	3,91,900	2,68,550	(1,23,350)
	7,72,450	8,77,150	1,04,700

### Additional Information:

- (i) There were no purchases or sales of tools.
- (ii) Equity shares were issued at a discount of 10 per cent.
- (iii) Old machinery that cost Rs.2,250 was scrapped and written off the books. Accumulated depreciation on such equipment was Rs 1,650.
- (iv) The income statement for the current year is:

Sales (net)	Rs 6,25,000
<b>Less: Expenses:</b>	
Operating charges:	
Materials and supplies	1,25,000
Direct labour	1,05,000
Manufacturing overhead	90,750
Depreciation	61,750
<i>(Contd.)</i>	
Selling expenses	1,22,500
General expenses	1,15,000
Interest expenses	3,750
Unusual items:	
Writing off of goodwill	1,00,000
Writing off of land	5,000
Loss on machinery	600
Discount on issue of equity shares 15,000	7,44,350

Net loss

(1,19,350)

You are required to prepare cash flow statement based on AS-3.

### Solution

#### Cash Flow Statement of Plastic Manufacturing Company for the Current Year (Indirect method)

<i>Particulars</i>	<i>Amount</i>
Cash flow from operating activities:	
Net loss	Rs (1,19,350)
Adjusted for	
Depreciation	61,750
Interest expenses	3,750
Writing off of goodwill	1,00,000
Writing off of land	5,000
Loss on machinery	600
Discount on issue of shares	15,000
Amortisation of discount on debentures	200
Operating profit before working capital changes	66,950
Adjusted for changes in working capital:	
Decrease in inventories	4,000
Increase in sundry debtors	(44,000)
Decrease in bills receivable	3,000
Decrease in unexpired insurance	100
Increase in creditors	3,000
Increase in bank overdraft	4,000
Decrease in bills payable	(500)
Decrease in bank loans (short-term)	(2,650)
Increase in accrued taxes	1,000
Allowance for doubtful debts	1,100
Net cash from operating activities	Rs 36,000
Cash flow from investing activities:	
Purchase of machine (1)	(67,250)
Purchase of building	(1,25,000)
Purchase of trade investments	1,500
Net cash used in investing activities	1,93,750
Cash flow from financing activities:	
Proceeds from issue of equity shares	1,35,000
Proceeds from issue of debentures	25,000
Interest paid (2)	(1,750)
Dividend paid (3)	(4,000)
Net cash from financing activities	1,54,250
Net decrease in cash and cash-equivalents	(3,500)
Cash and cash equivalents at the beginning of current year	4,500
Cash and cash equivalents at the end of current year	1,000

### Working Notes

1. Purchase of Machine	
Machinery at beginning of the year	Rs 1,00,000
Less scrap value of machine	2,250
	97,750
Closing balance of machine	1,65,000
Difference represents purchase of machine*	67,250
2. Interest paid	
Accrued interest at the beginning of year	3,000
Interest due during the year	3,750*
	6,750
Less accrued interest at the end of the year	5,000
Interest paid	1,750

\*Interest expenses are (Rs 1,750 paid + Payable, Rs 2,000). In operating activities, Rs 3,750 has been adjusted in determining figure of operating profit before working capital changes. Increase in accrued interest of Rs 2,000 (Rs 5,000 – Rs 3,000) is not adjusted subsequently as it would have added more to cash flow by Rs 2,000. (to avoid double counting).

3. Determination of dividend amount:

Balance of retained earnings 31st March, previous year	Rs 3,91,900
Less: Net loss of current year	1,19,350
	2,72,550

However, the balance of retained earnings as on December 31, current year is Rs 2,68,550, that is, Rs 4,000 less.

In the absence of any other information, this amount is assumed to have been paid as dividends to equityholders.

**P.5.8** The following are the summarised balance sheets of Hypothetical Ltd. as at March 31 for the two consecutive years 1 and 2. Prepare CFS as per AS-3.

<i>Particulars</i>	<i>(Rs in thousand)</i>	
	<i>Year 2</i>	<i>Year 1</i>
<b>Assets</b>		
Cash on hand and balances with banks	200	25
Short-term investments	670	135
Sundry debtors	1,700	1,200
Interest receivable	100	—
Inventories	900	1,950
Long-term investments	2,500	2,500
Fixed assets at cost	2,180	1,910
Accumulated depreciation	(1,450)	(1,060)
Fixed assets (net)	730	850
<b>Total assets</b>	<b>6,800</b>	<b>6,660</b>
<b>Liabilities</b>		
Sundry creditors	150	1,890
Interest payable	230	100
Income taxes payable	400	1,000
Long-term debt	1,110	1,040
<b>Total liabilities</b>	<b>1,890</b>	<b>4,030</b>
<b>Shareholders' Funds</b>		
Share capital	1,500	1,250
Reserves	3,410	1,380
<b>Total shareholders' funds</b>	<b>4,910</b>	<b>2,630</b>
<b>Total liabilities and shareholders' funds</b>	<b>6,800</b>	<b>6,660</b>

**Statement of Profit and Loss**

*for the year 2 ended March 31*

*(Rs '000)*

Sales	30,650
Cost of sales	(26,000)
Gross profit	4,650
Depreciation	(450)
Administrative and selling expenses	(910)
Interest expense	(400)
Interest income	300
Dividend income	200
Foreign exchange loss	(40)
Net profit before taxation and extraordinary item	3,350
Extraordinary item-Insurance proceeds from earthquake disaster settlement	180
Net profit after extraordinary item	3,530
Income-tax	(300)
<b>Net profit</b>	<b>3,230</b>

**Additional information** *(Rs in thousand)*

- (i) An amount of 250 was raised from the issue of share capital and a further 250 was raised from long-term borrowings.
- (ii) Interest expense was 400 of which 170 was paid during the period. 100 relating to interest expense of the prior period was also paid during the period.
- (iii) Dividends paid were 1,200.
- (iv) Tax deducted at source on dividends received (included in the tax expense of 300 for the year) amounted to 40.
- (v) During the period, the enterprise acquired fixed assets for 350. The payment was made in cash.
- (vi) Plant with original cost of 80 and accumulated depreciation of 60 was sold for 20.

- (vii) Foreign exchange loss of 40 represents the reduction in the carrying amount of a short-term investment in foreign-currency designated bonds arising out of a change in exchange rate between the date of acquisition of the investment and the balance sheet date.
- (viii) Sundry debtors and sundry creditors include amounts relating to credit sales and credit purchases only.

### Solution

Direct Method Cash Flow Statement		(Rs '000)
Cash flows from operating activities		
Cash receipts from customers	30,150	
Cash paid to suppliers and employees	(27,600)	
Cash generated from operations	2,550	
Income taxes paid	(860)	
Cash flow before extraordinary item	1,690	
Proceeds from earthquake disaster settlement	180	
Net cash from operating activities		1,870
Cash flows from investing activities		
Purchase of fixed assets	(350)	
Proceeds from sale of equipment	20	
Interest received	200	
Dividends received	160	
Net cash from investing activities		30
Cash flows from financing activities		
Proceeds from issuance of share capital	250	
Proceeds from long-term borrowings	250	
Repayment of long-term borrowings	(180)	
<i>(Contd.)</i>		
Interest paid	(270)	
Dividends paid	(1,200)	
Net cash used in financing activities		(1,150)
Net increase in cash and cash equivalents		750
Cash and cash equivalents at beginning of period (see Note 1)		160
Cash and cash equivalents at the end of period (see Note 1)		910

Indirect Method Cash Flow Statement		(Rs '000)
Cash flows from operating activities		
Net profit before taxation, and extraordinary item	3,350	
Adjustments for:		
Depreciation	450	
Foreign exchange loss	40	
Interest income	(300)	
Dividend income	(200)	
Interest expense	400	
Operating profit before working capital changes	3,740	
Increase in sundry debtors	(500)	
Decrease in inventories	1,050	
Decrease in sundry creditors	(1,740)	
Cash generated from operations	2,550	
Income taxes paid	(860)	
Cash flow before extraordinary item	1,690	
Proceeds from earthquake disaster settlement	180	
Net cash from operating activities		1,870
Cash flows from investing activities:		
Purchase of fixed assets	(350)	
Proceeds from sale of equipment	20	
Interest received	200	
Dividends received	160	
Net cash from investing activities		30
Cash flows from financing activities		
Proceeds from issuance of share capital	250	
Proceeds from long-term borrowings	(180)	
Repayment of long-term borrowings	(270)	

Interest paid	(1,200)	
Dividends paid		(1,150)
Net cash used in financing activities		750
Net increase in cash and cash equivalents		750
Cash and cash equivalents at beginning of period (see Note 1)		160
Cash and cash equivalents at end of period (see Note 1)		910

**Notes to the cash flow statement** (direct method and indirect method)

**1. Cash and cash-equivalents**

Cash and cash equivalents consist of cash on hand and balances with banks, and investments in money-market instruments. Cash and cash-equivalents included in the cash flow statement comprise the following balance sheet amounts.

	Year 2	Year 1
Cash on hand and balances with banks	Rs 200	Rs 25
Short-term investments	670	135
Cash and cash-equivalents	870	160
Effect of exchange rate changes	40	—
Cash and cash equivalents as restated	910	160

Cash and cash-equivalents at the end of the period include deposits with banks of 100 held by a branch which are not freely remissible to the company because of currency exchange restrictions.

The company has undrawn borrowing facilities of 2,000 of which 700 may be used only for future expansion.

**2. Total tax paid during the year** (including tax deducted at source on dividends received) amounted to 900.

Alternative Presentation (indirect method):

As an alternative, in an indirect method cash flow statement, operating profit before working capital changes is sometimes presented as follows:

Revenues excluding investment income	Rs 30,650	
Operating expense excluding depreciation		(26,910)
Operating profit before working capital changes		Rs 3,740

**Working Notes**

(Figures in Rs '000)

1. Cash receipts from customers		
Sales		30,650
Add: Sundry debtors at the end of the year		1,200
		31,850
Less: Sundry debtors at the end of the year		1,700
		30,150
2. Cash paid to suppliers and employees		
Cost of sales		26,000
Administrative and selling expenses		910
		26,910
Add: Sundry creditors at the beginning of the year	1,890	
Inventories at the end of the year	900	2,790
Less: Sundry creditors at the end of the year	150	29,700
Inventories at the beginning of the year	1,950	2,100
		27,600
3. Income taxes paid (including tax deducted at source from dividends received)		
Income tax expense for the year (including tax deducted at source from dividends received)		300
Add: Income tax liability at the beginning of the year		1,000
		1,300
Less: Income tax liability at the end of the year		400
		900
Out of 900, tax deducted at source on dividends received (amounting to 40) is included in cash flows from investing activities and the balance of 860 is included in cash flows from operating activities.		
4. Repayment of long-term borrowings		
Long-term debt at the beginning of the year		1,040
Add: Long-term borrowing made during the year		250

	1,290
Less: Long-term borrowings at the end of the year	1,110
	180
5. Interest paid	
Interest expense for the year	400
Add: Interest payable at the beginning of the year	100
	500
Less: Interest payable at the end of the year	230
	270

**P.5.9** The following are the summarised balance sheets of Sound Ltd. as on March 31 for the two consecutive years 1 and 2:

	<i>(Rs in thousand)</i>	
<i>Particulars</i>	<i>Year 2</i>	<i>Year 1</i>
<b>Assets:</b>		
Plant and machinery	1,980	1,010
Land and buildings	1,000	1,000
Long-term investments	550	550
Short-term investments	470	85
Sundry debtors	2,195	2,500
Inventories	1,400	1,300
Interest receivable	100	65
Cash in hand	300	500
Cash in bank	405	300
	8,400	7,310
<b>Liabilities:</b>		
Share capital	2,600	2,150
Reserve and surplus	1,460	900
15% debentures	2,000	1,800
Sundry creditors	440	650
Wages outstanding	40	20
Income-tax payable	400	450
Accumulated depreciation:		
Plant and machinery	910	840
Land and buildings	550	500
	8,400	7,310

**Income Statement**  
*for the period ending March 31, year 2 (Rs in thousand)*

Sales revenue	45,300
Less: Cost of sales	39,000
Gross profit	6,300
Less: Depreciation	(540)
Selling and administration expenses	(2,960)
Interest paid	(300)
Add: Interest income	65
Dividend income (gross)	95
Net profit before extraordinary items	2,660
Add: Insurance settlement received	10
	2,670
Less: Provision for income-taxes	550
Net profit after taxes	2,120

**Addition Information** *(Rs in thousand):*

- (1) 15% Debentures of Rs 300 was redeemed during year 2.
- (2) Tax deducted at source on dividends received (included in provision for taxes) amounts to Rs 15.
- (3) A plant costing Rs 500, having accumulated depreciation of Rs 420 was sold for Rs 80.
- (4) During year 2, interim dividend of Rs 760 was paid; final dividend paid was Rs 800.

(5) All sales and purchases are made on credit basis.  
You are required to prepare a cash flow statement as per AS-3 (revised).

**Solution**

Direct Method Cash Flow Statement		(Rs in thousand)
Cash flows from operating activities:		
Cash receipts from customers	45,605	
Cash paid to suppliers and employees	(42,250)	
Cash generated from operations	3,355	
Income tax paid	(585)	
Cash flow before extraordinary item	2,770	
Proceeds from insurance settlement	10	
Net cash from operating activities		2,780
Cash flows from investing activities:		
Purchases of plant and machinery	(1,470)	
Proceeds from sale of plant and machinery	80	
Interest received	30	
Dividends received (Rs 95 – 15)	80	
Net cash used in investing activities		(1,280)
Cash flows from financing activities:		
Proceeds from issuance of share capital	450	
Proceeds from issue of 15% debentures	500	
Redemption of 15% debentures	(300)	
Interest paid	(300)	
Dividends paid (interim + final)	(1,560)	
Net cash used in financing activities		(1,210)
Net increase in cash and cash-equivalent		290
Cash and cash-equivalent at beginning of year 2		885
Cash and cash-equivalents at the end of year 2		1,175

**Working Notes**

(figures in Rs '000)

1. Cash receipts from customers:	
Sales	45,300
Add: Sundry debtors at the beginning of year 2	2,500
	47,800
Less: Sundry debtors at the end of year 2	(2,195)
	45,605
2. Cash paid to suppliers and employees:	
Cost of sales	39,000
Add: Administrative and selling expenses	2,960
Sundry creditors at the beginning of year 2	650
Wages outstanding at the beginning of year 2	20
Inventories at the end of year 2	1,400
	44,030
Less: Sundry creditors at the end of year 2	(440)
Wages outstanding at the end of the year 2	(40)
Inventories at the end of year 1	(1,300)
	42,250
3. Income tax paid (including tax deducted at source from dividends received)	
Income tax for year 2 (including tax deducted at source from dividends received)	550
Add: Income tax liability at the beginning of year 2	450
Less: Income tax liability at the end of year 2	(400)
	600

Out of Rs 600, tax deducted at source on dividend received (amounting to Rs 15) is included in cash flows from investing activities and the balance of Rs 585 is included in cash flows from operating activities.

4. Interest received:

Interest income for year 2	65
<i>Add:</i> Interest receivable in the beginning of year 2	65
<i>Less:</i> Amount receivable at the end of year 2	(100)
	30
<b>5. Machinery purchased:</b>	
Balance at the end of year 2	1,980
<i>Add:</i> Book value of machine sold	500
<i>Less:</i> Balance at the beginning of year 2	(1,010)
	1,470

**Indirect Method Cash Flow Statement (Amount in '000 Rs)**

<b>Cash flows from operating activities:</b>		
Net profit before taxation and extraordinary items	2,660	
Adjustment for:		
Depreciation	540	
Interest income	(65)	
Dividend income	(95)	
Interest expenses	300	
Operating profit before working capital changes	3,740	
Decrease in sundry debtors	305	
Increase in wages outstanding	20	
<i>(Contd.)</i>		
Increase in inventories	(100)	
Decrease in creditors	(210)	
Cash generated from operations	3,355	
Income taxes paid	(585)	
Cash flow before extraordinary item	2,770	
<i>Add:</i> Insurance settlement	10	
Net cash from operating activities		2,780
<b>Cash flows from investing activities:</b>		
Purchase of plant and machinery	(1,470)	
Proceeds from sale of plant and machinery	80	
Interest received	30	
Dividends received (95 – 15)	80	
Net cash used in investing activities		(1,280)
<b>Cash flows from financial activities:</b>		
Proceeds from issuance of share capital	450	
Proceeds from issue of 15% debentures	500	
Redemption of 15% debentures	(300)	
Interest paid	(300)	
Dividends paid (interim + final)	(1,560)	
Net cash used in financing activities		(1,210)
Net increase in cash and cash-equivalent		290
Cash and cash-equivalents at beginning of year 2		885
Cash and cash-equivalents at the end of year 2		1,175

**Cash and Cash-equivalents (Figures in '000 Rs)**

<i>Particulars</i>	<i>Year 2</i>	<i>Year 1</i>
Cash in hand	300	500
Cash at bank	405	300
Short-term investments	470	85
	1,175	885

### Review Questions

**5.13** The following are the summarised balance sheets of Well Limited as on March 31, for the two consecutive years (previous year and current year)

	<i>(amount in '000 Rs)</i>	
	<i>Current Year</i>	<i>Previous Year</i>
Assets		



Plant and machinery	990	505
Land and buildings	500	500
Long-term investments	275	275
Short-term investments	235	43
Sundry debtors	1,098	1,250
Inventories	700	650
Interest receivable	50	32
Cash in hand	150	250
Cash at bank	202	150
	4,200	3,655
<b>Liabilities</b>		
Share capital	1,300	1,075
Reserves and surpluses	730	450
15% Debentures	1,000	900
Sundry creditors	220	325
Wages outstanding	20	10
Income tax payable	200	225
Accumulated depreciation		
— Plant and machinery	455	420
— Land and buildings	275	250
	4,200	3,655

**Income Statement**  
*for the current year, ending March 31*

Sales revenue	22,650
Less: cost of sales	19,500
Gross profit	3,150
Less: depreciation	(270)
selling and administration expenses	(1,480)
interest paid	(150)
Add: interest income	33
dividend income (gross)	47
Net profit before extraordinary items	1,330
Add: insurance settlement received	5
Net profit before taxes	1,335
Less: provision for income tax	275
Net profit after taxes	1,060

**Additional Information:**

- (i) 15% Debentures of Rs 3,00,000 were redeemed during the current year.
- (ii) Tax deducted at source on dividends received (included in provision for taxes) amounts to Rs 7,500.
- (iii) A plant costing Rs 2,50,000, having accumulated depreciation of Rs 2,10,000 was sold for Rs 40,000 in current year.
- (iv) During the current year, interim dividend of Rs 3,80,000 was paid; final dividend paid was Rs 4,00,000.
- (v) All sales and purchases are made on credit basis.

You are required to prepare cash flow statement based on AS-3.

**5.14** ABC Ltd. finds that its opening bank balance of Rs 1,80,000 as on April 1 has been converted into an overdraft of Rs 75,000 by the end of the year. From the information given below, prepare a statement to show how this happened.

	<i>Year beginning</i>	<i>Year-end</i>
Fixed assets	Rs 7,50,000	Rs 11,20,000
Stock in trade	1,90,000	3,30,000
Book debts	3,80,000	3,35,000
Trade creditors	2,70,000	3,50,000
Share capital	2,50,000	3,00,000
Share premium	—	25,000
Bills receivable	87,500	95,000

The profit before depreciation and income tax was Rs 2,40,000. During the year, income tax to the extent of Rs 1,37,500 was paid. Dividend paid were (i) final on the capital as on April 1 at 10 per cent and (ii) interim

at 5 per cent on the year-end capital.

**5.15** Given the following data (Rs thousands), prepare a cash flow statement based on AS-3.

	<i>Year 2</i>	<i>Year 1</i>
<i>Liabilities</i>		
Equity share capital	Rs 3,600	Rs 3,600
Reserves	2,545	2,100
Total shareholder's equity	6,145	5,700
Debentures	16,000	16,000
<i>Current liabilities</i>		
Bills payable	3,900	2,800
Creditors	4,800	4,100
Provision for taxation	155	400
Total liabilities	31,000	29,000
<i>Assets</i>		
<i>Fixed assets</i>		
Land	300	300
Buildings, plant and machinery (net)	7,000	5,800
Total fixed assets	7,300	6,100
<i>(Contd.)</i>		
<i>Current assets</i>		
Bank	2,600	2,200
Inventories at cost	14,600	14,400
Investments	600	600
Debtors	5,300	5,100
Advances	600	600
Total current assets	23,700	22,900
Total assets	31,000	29,000

**Statement of Income and Reconciliation of Retained Profits  
for the year-end 2 (Rs thousands)**

Sales		Rs 55,000
Cost of goods sold		40,000
Gross profit on sales		15,000
<i>Other operating expenses</i>		
Selling expenses	Rs 8,900	
Administrative	2,000	
Depreciation	1,000	11,900
Operating profit		3,100
Interest charged		800
Profit before tax		2,300
Provision for taxation (0.35)		805
Profit after taxation		1,495
Dividends		1,050
Net profit retained		445
Add reserves (beginning)		2,100
Reserves (closing)		2,545

**Answers**

- 5.13** Cash from operating activities Rs 1389.5; Cash from investing activities (Rs. 640.5); Cash from financial activities (Rs 605) ( Values are in thousands)
- 5.14** Cash from operating activities Rs 80,000; Cash from investing activities ( Rs. 3,70,000); Cash from financial activities Rs. 35,000
- 5.15** Cash from operating activities Rs 4,450; Cash from investing activities ( Rs. 2,200); Cash from financial activities (Rs. 1,850)