3

Financial Analysis and Planning

UNIT – I : APPLICATION OF RATIO ANALYSIS FOR PERFORMANCE EVALUATION, FINANCIAL HEALTH AND DECISION MAKING

Question 1

Discuss any three ratios computed for investment analysis. *(3 Marks, November, 2004)*

Answer

Three ratios computed for investment analysis are as follows;

(i) Earnings per share $= \dfrac{\text{Profit after tax}}{\text{Number of equity shares outstanding}}$

(ii) Dividend yield ratio $= \dfrac{\text{Equity dividend per share} \times 100}{\text{Market price per share}}$

(iii) Return on capital employed $= \dfrac{\text{Net profit before interest and tax} \times 100}{\text{Capital employed}}$

Question 2

Discuss the financial ratios for evaluating company performance on operating efficiency and liquidity position aspects. *(4 Marks, November, 2006)*

Answer

Financial ratios for evaluating performance on operational efficiency and liquidity position aspects are discussed as:

Operating Efficiency: Ratio analysis throws light on the degree of efficiency in the management and utilization of its assets. The various activity ratios (such as turnover ratios) measure this kind of operational efficiency. These ratios are employed to evaluate the efficiency with which the firm manages and utilises its assets. These ratios usually indicate the frequency of sales with respect to its assets. These assets may be capital assets or working capital or average inventory. In fact, the solvency of a firm is, in the ultimate analysis, dependent upon the sales revenues generated by use of its assets – total as well as its components.

Liquidity Position: With the help of ratio analysis, one can draw conclusions regarding liquidity position of a firm. The liquidity position of a firm would be satisfactory, if it is able to meet its current obligations when they become due. Inability to pay-off short-term liabilities affects its credibility as well as its credit rating. Continuous default on the part of the business leads to commercial bankruptcy. Eventually such commercial bankruptcy may lead to its sickness and dissolution. Liquidity ratios are current ratio, liquid ratio and cash to current liability ratio. These ratios are particularly useful in credit analysis by banks and other suppliers of short-term loans.

Question 3

Explain the need of debt-service coverage ratio. *(2 Marks, May, 2007)*

Answer

Debt Service Coverage Ratio: Lenders are interested in this ratio to judge the firm's ability to pay off current interest and installments.

$$\text{Debt service coverage ratio} = \frac{\text{Earnings available for debt service}}{\text{Interest} + \text{Instalment}}$$

Where,

Earning for debt service = Net profit

+ Non-cash operating expenses like depreciation and other amortizations

+ Non-operating adjustments like loss on sale of

+ Fixed assets + Interest on Debt Fund.

Question 4

Diagrammatically present the DU PONT CHART to calculate return on equity.

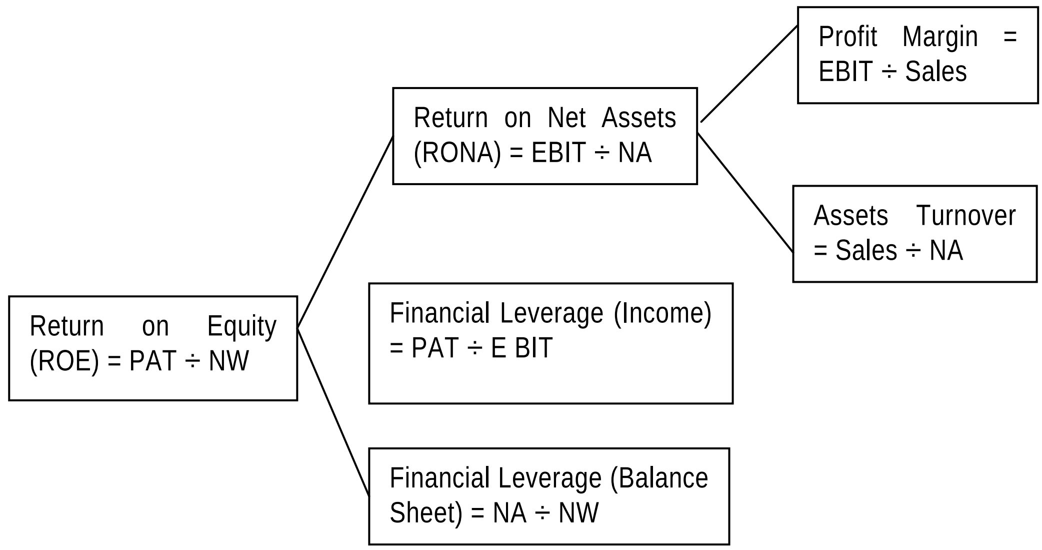
(3 Marks, May, 2007)

Answer

Du Pont Chart

There are three components in the calculation of return on equity using the traditional DuPont model- the net profit margin, asset turnover, and the equity multiplier. By examining each input individually, the sources of a company's return on equity can be discovered and compared to its competitors.

Return on Equity = (Net Profit Margin) (Asset Turnover) (Equity Multiplier)



Du Pont Chart

Question 5

How return on capital employed is calculated? What is its significance?

(2 Marks, November, 2008)

Answer

Return on Capital Employed (ROCE): It is the most important ratio of all. It is the percentage of return on funds invested in the business by its owners. In short, it indicates what returns management has made on the resources made available to them before making any distribution of those returns.

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

Where,

Capital Employed = Equity Share Capital

+ Reserve and Surplus

+ Pref. Share Capital

+ Debentures and other long term loan

– Misc. expenditure and losses

– Non-trade Investments.

Intangible assets (assets which have no physical existence like goodwill, patents and trademarks) should be included in the capital employed. But no fictitious asset should be included within capital employed.

Question 6

What is quick ratio? What does it signify? *(2 Marks, November, 2008)*

Answer

Quick Ratio: It is a much more exacting measure than the current ratio. It adjusts the current ratio to eliminate all assets that are not already in cash (or near cash form). A ratio less than one indicates low liquidity and hence is a danger sign.

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

Where,

Quick Assets = Current Assets – Inventory

Question 7

What do you mean by Stock Turnover ratio and Gearing ratio? *(3 Marks, November, 2008)*

Answer

Stock Turnover Ratio and Gearing Ratio

Stock Turnover Ratio helps to find out if there is too much inventory build-up. An increasing stock turnover figure or one which is much larger than the "average" for an industry may indicate poor stock management. The formula for the Stock Turnover Ratio is as follows:

$$\text{Stock Turnover ratio} = \frac{\text{Cost of Sales}}{\text{Average inventory}} \text{ or } \frac{\text{Turnover}}{\text{Average inventory}}$$

Gearing Ratio indicates how much of the business is funded by borrowing. In theory, the higher the level of borrowing (gearing), the higher are the risks to a business, since the payment of interest and repayment of debts are not "optional" in the same way as dividends. However, gearing can be a financially sound part of a business's capital structure particularly if the business has strong, predictable cash flows. The formula for the Gearing Ratio is as follows:

$$\text{Gearing Ratio} = \frac{\text{Borrowings (all long term debts including normal overdraft)}}{\text{Net Assets or Shareholders' funds}}$$

Question 8

How is Debt service coverage ratio calculated? What is its significance? *(2 Marks, June, 2009)*

Answer

Calculation of Debt Service Coverage Ratio (DSCR) and its Significance

The debt service coverage ratio can be calculated as under:

$$\text{Debt Service Coverage Ratio} = \frac{\text{Earnings available for debt service}}{\text{Interest} + \text{Installments}}$$

$$\text{Or, Debt Service Coverage Ratio} = \frac{\text{EBITDA}}{\text{Interest} + \dfrac{\text{Principal Repayment Due}}{1 - \text{Tc}}}$$

Debt service coverage ratio indicates the capacity of a firm to service a particular level of debt i.e. repayment of principal and interest. High credit rating firms target DSCR to be greater than 2 in its entire loan life. High DSCR facilitates the firm to borrow at the most competitive rates.

Question 9

Discuss the composition of Return on Equity (ROE) using the DuPont model.

(3 Marks, June, 2009)

Answer

Composition of Return on Equity using the DuPont Model

There are three components in the calculation of return on equity using the traditional DuPont model- the net profit margin, asset turnover, and the equity multiplier. By examining each input individually, the sources of a company's return on equity can be discovered and compared to its competitors.

(a) *Net Profit Margin:* The net profit margin is simply the after-tax profit a company generates for each rupee of revenue.

Net profit margin = Net Income ÷ Revenue

Net profit margin is a safety cushion; the lower the margin, lesser the room for error.

(b) *Asset Turnover:* The asset turnover ratio is a measure of how effectively a company converts its assets into sales. It is calculated as follows:

Asset Turnover = Revenue ÷ Assets

The asset turnover ratio tends to be inversely related to the net profit margin; i.e., the higher the net profit margin, the lower the asset turnover.

(c) *Equity Multiplier:* It is possible for a company with terrible sales and margins to take on excessive debt and artificially increase its return on equity. The equity multiplier, a measure of financial leverage, allows the investor to see what portion of the return on equity is the result of debt. The equity multiplier is calculated as follows:

Equity Multiplier = Assets ÷ Shareholders' Equity.

Calculation of Return on Equity

To calculate the return on equity using the DuPont model, simply multiply the three components (net profit margin, asset turnover, and equity multiplier.)

Return on Equity = Net profit margin× Asset turnover × Equity multiplier

Question 10

Explain briefly the limitations of Financial ratios. *(2 Marks, November, 2009)*

Answer

Limitations of Financial Ratios

The limitations of financial ratios are listed below:

(a) *Diversified product lines*: Many businesses operate a large number of divisions in quite different industries. In such cases, ratios calculated on the basis of aggregate data cannot be used for inter-firm comparisons.

(b) *Financial data are badly distorted by inflation*: Historical cost values may be substantially different from true values. Such distortions of financial data are also carried in the financial ratios.

(c) Seasonal factors may also influence financial data.

(d) *To give a good shape to the popularly used financial ratios (like current ratio, debt- equity ratios, etc.)*: The business may make some year-end adjustments. Such window dressing can change the character of financial ratios which would be different had there been no such change.

(e) *Differences in accounting policies and accounting period*: It can make the accounting data of two firms non-comparable as also the accounting ratios.

(f) There is no standard set of ratios against which a firm's ratios can be compared: Sometimes a firm's ratios are compared with the industry average. But if a firm desires to be above the average, then industry average becomes a low standard. On the other hand, for a below average firm, industry averages become too high a standard to achieve.

(*Note*: *Students to write any four limitations*)

Question 11

Explain the following ratios:

(i) Operating ratio

(ii) Price earnings ratio *(4 Marks, May, 2011)*

Answer

(i) Concept of Operating Ratio

Operating ratio= $\frac{\text{Cost of goods sold} + \text{operating expenses}}{\text{Net sales}} \times 100$

This is the test of the operational efficiency with which the business is being carried; the operating ratio should be low enough to leave a portion of sales to give a fair return to the investors.

(ii) Concept of Price-Earnings ratio

Price Earnings Ratio = $\frac{\text{Market price per equity share}}{\text{Earning per share}}$

This ratio indicates the number of times the earnings per share is covered by its market price. It indicates the expectation of equity investors about the earnings of the firm.

Question 12

Explain the important ratios that would be used in each of the following situations:

(i) A bank is approached by a company for a loan of ₹ 50 lakhs for working capital purposes.

(ii) A long term creditor interested in determining whether his claim is adequately secured.

(iii) A shareholder who is examining his portfolio and who is to decide whether he should hold or sell his holding in the company.

(iv) A finance manager interested to know the effectiveness with which a firm uses its available resources. *(4 Marks, May, 2012)*

Answer

Important Ratios used in different situations

(i) Liquidity Ratios- Here Liquidity or short-term solvency ratios would be used by the bank to check the ability of the company to pay its short-term liabilities. A bank may use Current ratio and Quick ratio to judge short terms solvency of the firm.

(ii) Capital Structure/Leverage Ratios- Here the long-term creditor would use the capital structure/leverage ratios to ensure the long term stability and structure of the firm. A long term creditors interested in the determining whether his claim is adequately secured may use Debt-service coverage and interest coverage ratio.

(iii) Profitability Ratios- The shareholder would use the profitability ratios to measure the profitability or the operational efficiency of the firm to see the final results of business operations. A shareholder may use return on equity, earning per share and dividend per share.

(iv) *Activity Ratios*- The finance manager would use these ratios to evaluate the efficiency with which the firm manages and utilises its assets. Some important ratios are (a) Capital turnover ratio (b) Current and fixed assets turnover ratio (c) Stock, Debtors and Creditors turnover ratio.

Question 13

With the help of the following information complete the Balance Sheet of MNOP Ltd.:

Equity share capital	*₹ 1,00,000*
The relevant ratios of the company are as follows:	
Current debt to total debt	*.40*
Total debt to owner's equity	*.60*
Fixed assets to owner's equity	*.60*
Total assets turnover	*2 Times*
Inventory turnover	*8 Times*

(7 Marks, May 2005)

Answer

MNOP Ltd

Balance Sheet

Liabilities	*₹*	*Assets*	*₹*
Owner equity	1,00,000	Fixed assets	60,000
Current debt	24,000	Cash	60,000
Long term debt	36,000	Inventory	40,000
	1,60,000		1,60,000

Working Notes:

1. Total debt = 0.60 × Owners equity = 0.60 × ₹₹ 1,00,000 = ₹ 60,000

   Current debt to total debt = 0.40, hence current debt = 0.40 × 60,000 = 24,000

2. Fixed assets = 0.60 × Owners equity = 0.60 × ₹ 1,00,000 = ₹ 60,000

3. Total equity = Total debt + Owners equity = ₹ 60,000 + ₹ 1,00,000 = ₹ 1,60,000

4. Total assets consisting of fixed assets and current assets must be equal to ₹ 1,60,000 (Assets = Liabilities + Owners equity). Since Fixed assets are ₹ 60,000 , hence , current assets should be ₹ 1,00,000
5. Total assets to turnover = 2 Times : Inventory turnover = 8 Times

   Hence, Inventory /Total assets = 2/8=1/4, Total assets = 1,60,000

   Therefore Inventory = 1,60,000/4 = 40,000 Balance on Asset side
6. Cash = 1,00,000 – 40,000 = 60,000

Question 14

Using the following data, complete the Balance Sheet given below:

Gross Profits		*₹ 54,000*	
Shareholders' Funds		*₹ 6,00,000*	
Gross Profit margin		*20%*	
Credit sales to Total sales		*80%*	
Total Assets turnover		*0.3 times*	
Inventory turnover		*4 times*	
Average collection period (a 360 days year)		*20 days*	
Current ratio		*1.8*	
Long-term Debt to Equity		*40%*	

Balance Sheet

Liabilities	*Amount (₹)*	*Assets*	*Amount (₹)*
Creditors	………………	*Cash*	……………
Long-term debt	………………	*Debtors*	……………
Shareholders' funds	………………	*Inventory*	……………
		Fixed assets	……………

(12 Marks, November, 2005)

Answer

Gross Profits ₹ 54,000

Gross Profit Margin 20%

$$\therefore \quad \text{Sales} = \frac{\text{Gross Profits}}{\text{Gross Profit Margin}} = ₹\ 54{,}000 / 0.20 = ₹\ 2{,}70{,}000$$

Credit Sales to Total Sales	= 80%
∴ Credit Sales	= ₹ 2,70,000×0.80 = ₹ 2,16,000
Total Assets Turnover	= 0.3 times
∴ Total Assets	$= \frac{\text{Sales}}{\text{Total Assets Turnover}}$
	$= \frac{₹\ 2,70,000}{0.3}$
	= ₹ 9,00,000
Sales – Gross Profits	= COGS
∴ COGS	= ₹ 2, 70,000 – 54,000
	= ₹ 2, 16,000
Inventory turnover	= 4 times
Inventory	$= \frac{\text{COGS}}{\text{Inventory turnover}} = \frac{2,16,000}{4}$
	= ₹ 54,000
Average Collection Period	= 20 days
∴ Debtors turnover	$= \frac{360}{\text{Average Collection Period}}$
	= 360/20=18
∴ Debtors	$= \frac{\text{Credit Sales}}{\text{Debtors turnover}}$
	$= \frac{₹\ 2,16,000}{18}$
	= ₹12,000
Current ratio	= 1.8
1.8	$= \frac{\text{Debtors} + \text{Inventory} + \text{Cash}}{\text{Creditors}}$
1.8 Creditors	= (₹12,000 + ₹54,000 + Cash)
1.8 Creditors	= ₹66,000 + Cash
Long-term Debt to Equity	= 40%
Shareholders Funds	= ₹6, 00,000

∴ Long-term Debt = ₹6, 00,000×40%

= ₹2, 40,000

Creditors (Balance figure) = 9, 00,000 – (6, 00,000 + 2, 40,000)

= ₹60,000

∴ Cash = (60,000×1.8) – 66,000

= ₹42,000

Balance Sheet (in ₹)

Creditors (Bal. Fig)	60,000	Cash	42,000
		Debtors	12,000
Long- term debt	2,40,000	Inventory	54,000
Shareholders' funds	6,00,000	Fixed Assets (Bal fig.)	7,92,000
	9,00,000		9,00,000

Question 15

JKL Limited has the following Balance Sheets as on March 31, 2006 and March 31, 2005:

Balance Sheet

	₹in lakhs	
	March 31, 2006	*March 31, 2005*
Sources of Funds:		
Shareholders Funds	*2,377*	*1,472*
Loan Funds	*3,570*	*3,083*
	5,947	*4,555*
Applications of Funds:		
Fixed Assets	*3,466*	*2,900*
Cash and bank	*489*	*470*
Debtors	*1,495*	*1,168*
Stock	*2,867*	*2,407*
Other Current Assets	*1,567*	*1,404*
Less: Current Liabilities	*(3,937)*	*(3,794)*
	5,947	*4,555*

The Income Statement of the JKL Ltd. for the year ended is as follows:

	₹ in lakhs	
	March 31, 2006	March 31, 2005
Sales	22,165	13,882
Less: Cost of Goods sold	20,860	12,544
Gross Profit	1,305	1,338
Less: Selling, General and Administrative expenses	1,135	752
Earnings before Interest and Tax (EBIT)	170	586
Interest Expense	113	105
Profits before Tax	57	481
Tax	23	192
Profits after Tax (PAT)	34	289

Required:

(i) Calculate for the year 2005-06:

(a) Inventory turnover ratio

(b) Financial Leverage

(c) Return on Investment (ROI)

(d) Return on Equity (ROE)

(e) Average Collection period.

(ii) Give a brief comment on the Financial Position of JKL Limited. ***(12 Marks, May, 2006)***

Answer

Ratios for the year 2005-2006

(i) (a) Inventory turnover ratio

$$= \frac{\text{COGS}}{\text{Average Inventory}} = \frac{20,860}{\frac{(2,867 + 2,407)}{2}} = 7.91$$

(b)

Financial leverage	*2005-06*	*2004-05*
$= \dfrac{\text{EBIT}}{\text{EBIT} - \text{I}}$	$= \dfrac{170}{57}$	$= \dfrac{586}{481}$
	= 2.98	= 1.22

(c) ROI

$$= \frac{NOPAT}{Sales} \times \frac{Sales}{Average\ Capital\ employed}$$

$$= \frac{57 \times (1 - .4)}{22{,}165} \times \frac{22{,}165}{\frac{(5{,}947 + 4{,}555)}{2}}$$

$$= \frac{34.2}{22{,}165} \times \frac{22{,}165}{5{,}251}$$

= 0.65%

(d) ROE

$$= \frac{PAT}{Average\ shareholders'\ funds}$$

$$= \frac{34}{\frac{(2{,}377 + 1{,}472)}{2}}$$

$$= \frac{34}{1{,}924.5}$$

= 1.77%

(e) Average Collection Period*

$$Average\ Sales\ per\ day = \frac{22{,}165}{365} = ₹\ 60.73\ lakhs$$

$$Average\ collection\ period = \frac{Average\ Debtors}{Average\ sales\ per\ day}$$

$$= \frac{\frac{(1{,}495 + 1{,}168)}{2}}{60.73}$$

$$= \frac{1331.5}{60.73}$$

= 22 days

(*Note: *In the above solution, 1 year = 365 days has been assumed. Alternatively, some candidates may give the solution on the basis 1 year = 360 days.)*

(ii) Brief Comment on the financial position of JKL Ltd.

The profitability of operations of the company are showing sharp decline due to increase in operating expenses. The financial and operating leverages are becoming adverse. The liquidity of the company is under great stress.

Question 16

From the information given below calculate the amount of Fixed assets and Proprietor's fund.

Ratio of fixed assets to proprietors fund	*= 0.75*
Net Working Capital	*= ₹ 6,00,000* *(2 Marks, November, 2009)*

Answer

Calculation of Fixed Assets and Proprietor's Fund

Since Ratio of Fixed Assets to Proprietor's Fund	= 0.75
Therefore, Fixed Assets	= 0.75 Proprietor's Fund
Net Working Capital	= 0.25 Proprietor's Fund
6,00,000	= 0.25 Proprietor's Fund
Therefore, Proprietor's Fund	$= \frac{₹\ 6,00,000}{0.25}$
	= ₹ 24,00,000
Proprietor's Fund	= ₹ 24,00,000
Since, Fixed Assets	= 0.75 Proprietor's Fund
Therefore, Fixed Assets	= 0.75 × 24,00,000
	= ₹ 18,00,000
Fixed Assets	= ₹ 18,00,000

Question 17

ABC Limited has an average cost of debt at 10 per cent and tax rate is 40 per cent. The Financial leverage ratio for the company is 0.60. Calculate Return on Equity (ROE) if its Return on Investment (ROI) is 20 per cent. *(2 Marks, May, 2007)*

Answer

$ROE = [ROI + \{(ROI - r) \times D/E\}] (1 - t)$

$= [0.20 + \{(0.20 - 0.10) \times 0.60\}] (1 - 0.40)$

$=[0.20 + 0.06] \times 0.60 = 0.1560$

ROE = 15.60%

Question 18

The Sales Manager of AB Limited suggests that if credit period is given for 1.5 months then sales may likely to increase by ₹1,20,000 per annum. Cost of sales amounted to 90% of sales. The risk of non-payment is 5%. Income tax rate is 30%. The expected return on investment is ₹3,375 (after tax). Should the company accept the suggestion of Sales Manager?

(2 Marks, May, 2008)

Answer

Profitability on additional sales:

	₹.
Increase in sales	1,20,000
Less: Cost of sales (90% sales)	1,08,000
Less: Bad debt losses (5% of sales)	6,000
Net profit before tax	6,000
Less: Income tax (30%)	1,800
	4,200

Advise: *Net profit after tax ₹4,200 on additional sales is higher than expected return. Hence, proposal should be accepted.*

Question 19

MNP Limited has made plans for the next year 2010 -11. It is estimated that the company will employ total assets of ₹ 25,00,000; 30% of assets being financed by debt at an interest cost of 9% p.a. The direct costs for the year are estimated at ₹.15,00,000 and all other operating expenses are estimated at ₹ 2,40,000. The sales revenue are estimated at ₹ 22,50,000. Tax rate is assumed to be 40%. Required to calculate:

(i) Net profit margin;

(ii) Return on Assets;

(iii) Asset turnover; and

(iv) Return on Equity. *(5 Marks, November, 2010)*

Answer

The net profit is calculated as follows:

	₹
Sales Revenue	22,50,000
Less: Direct Costs	15,00,000

Gross Profits	7,50,000
Less: Operating Expense	2,40,000
EBIT	5,10,000
Less: Interest (9% × 7,50,000)	67,500
EBT	4,42,500
Less: Taxes (@ 40%)	1,77,000
PAT	2,65,500

(i) Net Profit Margin

$$\text{Net Profit Margin} = \frac{\text{EBIT (1 - t)}}{\text{Sales}} \times 100 = \frac{5{,}10{,}000 \times (1-0.4)}{22{,}50{,}000} = 13.6\%$$

(ii) Return on Assets (ROA)

ROA = EBIT (1− t) ÷ Total Assets

= 5,10,000 (1− 0.4) ÷ 25,00,000 = 3,06,000 ÷ 25,00,000 = 0.1224 = 12.24%

(iii) Asset Turnover

$$\text{Asset Turnover} = \frac{\text{Sales}}{\text{Assets}} = \frac{22{,}50{,}000}{25{,}00{,}000} = 0.9$$

Asset Turnover = 0.9

(iv) Return on Equity (ROE)

$$\text{ROE} = \frac{\text{PAT}}{\text{Equity}} = \frac{2{,}65{,}500}{17{,}50{,}000} = 15.17\%$$

ROE = 15.17%

Question 20

The financial statements of a company contain the following information for the year ending 31st March, 2011:

Particulars	₹
Cash	*1,60,000*
Sundry Debtors	*4,00,000*
Short-term Investment	*3,20,000*
Stock	*21,60,000*
Prepaid Expenses	*10,000*
Total Current Assets	*30,50,000*

Current Liabilities	*10,00,000*
10% Debentures	*16,00,000*
Equity Share Capital	*20,00,000*
Retained Earnings	*8,00,000*
Statement of Profit for the year ended 31st March, 2011	
Sales (20% cash sales)	*40,00,000*
Less: Cost of goods sold	*28,00,000*
Profit before Interest & Tax	*12,00,000*
Less: Interest	*1,60,000*
Profit before tax	*10,40,000*
Less: Tax @ 30%	*3,12,000*
Profit After Tax	*7,28,000*

You are required to calculate:

(i) Quick Ratio

(ii) Debt-equity Ratio

(iii) Return on Capital Employed, and

(iv) Average collection period (Assuming 360 days in a year). ***(8 Marks, November, 2011)***

Answer

(i) Quick Ratio $= \dfrac{\text{Quick Assets}}{\text{Current Liabilities}}$

Quick Assets = Current Assets – Stock – Prepaid Expenses

= 30,50,000- 21,60,000-10,000

Quick Assets = 8,80,000

Quick Ratio = 8,80,000/10,00,000 = 0.88 : 1

(ii) Debt-Equity Ratio $= \dfrac{\text{Long term debt}}{\text{Shareholders Funds}}$

$= \dfrac{16,00,000}{(20,00,000 + 8,00,000)} = 0.57:1$

(iii) Return on Capital Employed (ROCE)

$$\text{ROCE} = \frac{\text{PBIT}}{\text{Capital Employed}} \times 100 = \frac{12,00,000}{44,00,000} \times 100 = 27.27\%$$

[**Note:** ROCE can be computed alternatively taking Average total assets into consideration (EBIT (1 – T)/Average Total Assets). The value of ROCE would then change accordingly as 15.56%]

(iv) Average Collection Period

$$= \frac{\text{Sundry Debtors}}{\text{Credit Sales}} \times 360$$

$$= \frac{4,00,000}{32,00,000} \times 360 = 45 \text{ days}$$

Question 21

The following accounting information and financial ratios of M Limited relate to the year ended 31st March, 2012 :

Inventory Turnover Ratio	*6 Times*
Creditors Turnover Ratio	*10 Times*
Debtors Turnover Ratio	*8 Times*
Current Ratio	2.4
Gross Profit Ratio	*25%*

Total sales ₹ 30,00,000; cash sales 25% of credit sales; cash purchases ₹ 2,30,000; working capital ₹ 2,80,000; closing inventory is ₹ 80,000 more than opening inventory.

You are required to calculate:

(i) Average Inventory

(ii) Purchases

(iii) Average Debtors

(iv) Average Creditors

(v) Average Payment Period

(vi) Average Collection Period

(vii) Current Assets

(viii) Current Liabilities. *(8 Marks, November, 2012)*

Answer

(i) Computation of Average Inventory

Gross Profit = 25% of 30,00,000

Gross Profit = 7,50,000

Cost of goods sold (COGS) = 30,00,000 – 7,50,000

COGS = 22,50,000

Inventory Turnover Ratio = $\frac{\text{COGS}}{\text{Average Inventory}}$

$$6 = \frac{22,50,000}{\text{Average inventory}}$$

Average inventory = 3,75,000

(ii) Computation of Purchases

Purchases = COGS + Increase in Stock = 22,50,000 + 80,000

Purchases = 23,30,000

(iii) Computation of Average Debtors

Let Credit Sales be ₹ 100

Cash sales = $\frac{25}{100}$ x 100 =₹ 25

Total Sales = 100 +25= 125

Total sales is ₹ 125 credit sales is ₹ 100

If total sales is 30,00,000, then credit sales is = $\frac{30,00,000\text{x}100}{125}$

Credit Sales = 24,00,000

Cash Sales = 6,00,000

Debtors Turnover Ratio = $\frac{\text{Net Credit Sales}}{\text{Average debtors}}$ = 8 = $\frac{24,00,000}{\text{Average debtors}}$ = 8

Average Debtors = $\frac{24,00,000}{8}$

Average Debtors = 3,00,000

(iv) Computation of Average Creditors

Credit Purchases = Purchases – Cash Purchases

= 23,30,000 – 2,30,000 = 21,00,000

Creditors Turnover Ratio = $\frac{\text{Credit Purchases}}{\text{Average Creditors}}$

$$10 = \frac{21,00,000}{\text{Average Creditors}}$$

Average Creditors = 2,10,000

(v) Computation of Average Payment Period

$$\text{Average Payment Period} = \frac{\text{Average Creditors}}{\text{Average Daily Credit Purchases}}$$

$$= \frac{2,10,000}{\left(\frac{\text{Credit Purchases}}{365}\right)} = \frac{2,10,000}{\left(\frac{21,00,000}{365}\right)}$$

$$= \frac{2,10,000}{21,00,000} \text{ x } 365 = 36.5 \text{ days}$$

OR

Average Payment Period = 365/Creditors Turnover Ratio

$$= \frac{365}{10} = 36.5 \text{ days}$$

(vi) Computation of Average Collection Period

$$\text{Average Collection Period} = \frac{\text{Average Debtors}}{\text{Net Credit Sales}} \times 365$$

$$= \frac{3,00,000}{24,00,000} \times 365 = 45.625 \text{ days}$$

OR

Average collection period = 365/ Debtors Turnover Ratio

$$= \frac{365}{8} = 45.625 \text{ days}$$

(vii) Computation of Current Assets

$$\text{Current Ratio} = \frac{\text{Current Assets (CA)}}{\text{Current Liabilities (CL)}}$$

2.4 Current Liabilities = Current Assets or CL = CA/2.4

Working capital = Current Assets – Current liabilities

2,80,000 = CA-CA/2.4

2,80,000 = 1.4 CA/2.4

CA = 4,80,000

(viii) Computation of Current Liabilities

Current liabilities = $\frac{4,80,000}{2.4}$ = 2,00,000

Question 22

The following information relates to Beta Ltd. for the year ended 31st March 2013:

Net Working Capital	*₹ 12,00,000*
Fixed Assets to Proprietor's Fund Ratio	*0.75*
Working Capital Turnover Ratio	*5 Times*
Return on Equity (ROE)	*15%*

There is no debt capital.

You are required to calculate:

(i) Proprietor's Fund

(ii) Fixed Assets

(iii) Net Profit Ratio. *(5 Marks, May 2013)*

Answer

(i) Calculation of Proprietor's Fund

Since Ratio of Fixed Assets to Proprietor's Fund = 0.75

Therefore, Fixed Assets = 0.75 Proprietor's Fund

Net Working Capital = 0.25 Proprietor's Fund

12,00,000 = 0.25 Proprietor's Fund

Therefore, Proprietors Fund = $\frac{12,00,000}{0.25}$ = 48,00,000

(ii) Calculation of Fixed Assets

Fixed Assets = 0.75 Proprietor's Fund

= 0.75 x 48,00,000 = 36,00,000

(iii) Calculation of Net Profit Ratio

Net Working Capital = 0.25 x 48,00,000 = 12,00,000

Working Capital Turnover Ratio = $\frac{\text{Sales}}{\text{Working Capital}}$

$\therefore$ Sales = 60,00,000

ROE	$= \frac{PAT}{Equity}$
0.15	$= \frac{PAT}{48,00,000}$
PAT	= 7,20,000
Net Profit Ratio	$= \frac{\text{Net Profit}}{\text{Sales}} \times 100$
	$= \frac{7,20,000}{60,00,000} \times 100$
Net Profit Ratio	= 12%

[Note: *Fixed Assets may be computed alternatively by (Net Working Capital × Fixed Assets to Proprietor's Fund Ratio) and Proprietor's Fund by (Fixed Assets + Net Working Capital)].*

Question 23

The assets of SONA Ltd. consist of fixed assets and current assets, while its current liabilities comprise bank credit in the ratio of 2 : 1. You are required to prepare the Balance Sheet of the company as on 31st March 2013 with the help of following information:

Share Capital	*₹5,75,000*	
Working Capital (CA-CL)	*₹1,50,000*	
Gross Margin	*25%*	
Inventory Turnover	*5 times*	
Average Collection Period	*1.5 months*	
Current Ratio	*1.5:1*	
Quick Ratio	*0.8: 1*	
Reserves & Surplus to Bank & Cash	*4 times*	*(8 Marks, November, 2013)*

Answer

Working Notes:

1. Computation of Current Assets (CA) and Current Liabilities (CL)

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

$$\frac{CA}{CL} = \frac{1.5}{1}$$

$\therefore$ CA = 1.5 CL

CA - CL = 1,50,000

1.5 CL- CL = 1,50,000

0.5 CL = 1,50,000

CL $= \frac{1,50,000}{0.5} = 3,00,000$

CA = 1.5 x 3,00,000 = 4,50,000

2. Computation of Bank Credit (BC) and Other Current Liabilities (OCL)

$\frac{\text{Bank Credit}}{\text{Other CL}} = \frac{2}{1}$

BC = 2 OCL

BC + OCL = CL

2 OCL + OCL = 3,00,000

3 OCL = 3,00,000

OCL = 1,00,000

Bank Credit = 2 × 1,00,000 = 2,00,000

3. Computation of Inventory

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

$= \frac{\text{Current Assets - Inventories}}{\text{Current Liabilities}}$

0.8 $= \frac{\text{4,50,000 - Inventories}}{3,00,000}$

0.8 × 3,00,000 = 4,50,000 – Inventories

Inventories = 4,50,000 – 2,40,000 = 2,10,000

4. Computation of Debtors

Inventory Turnover = 5 times

Average Inventory $= \frac{\text{COGS}}{\text{Inventory Turnover}}$

COGS = 2,10,000 × 5 = 10,50,000

Average Collection Period (ACP) = 1.5 months = 45 days

Debtors Turnover = $\frac{360}{ACP} = \frac{360}{45} = 8$

$\frac{\text{Sales - COGS}}{\text{Sales}} \times 100 = 25\%$

$\text{Sales - COGS} = \frac{25 \times \text{Sales}}{100}$

Sales – 0.25 Sales = COGS

0.75 Sales = 10,50,000

Sales = $\frac{10,50,000}{0.75} = 14,00,000$

Debtors = $\frac{\text{Sales}}{\text{Debtors Turnover}}$

$= \frac{14,00,000}{8} = 1,75,000$

5. Computation of Bank and Cash

Bank & Cash = CA - (Debtors + Inventory)

= 4,50,000 – (1,75,000 + 2,10,000)= 4,50,000 – 3,85,000 = 65,000

6. Computation of Reserves & Surplus

$\frac{\text{Reserves \& Surplus}}{\text{Bank \& Cash}} = 4$

Reserves & Surplus = 4 × 65,000 = 2,60,000

Balance Sheet of SONA Ltd. as on March 31, 2013

Liabilities	₹	Assets	₹
Share Capital	5,75,000	Fixed Assets	6,85,000
Reserves & Surplus	2,60,000	Current Assets:	
Current Liabilities:		Inventories	2,10,000
Bank Credit	2,00,000	Debtors	1,75,000
Other Current Liabilities	1,00,000	Bank & Cash	65,000
	11,35,000		11,35,000

Question 24

NOOR Limited provides the following information for the year ending 31st March, 2014:

Equity Share Capital	*₹ 25,00,000*
Closing Stock	*₹ 6,00,000*
Stock Turnover Ratio	*5 times*
Gross Profit Ratio	*25%*
Net Profit / Sale	*20%*
Net Profit / Capital	$\frac{1}{4}$

You are required to prepare:

Trading and Profit & Loss Account for the year ending 31st March, 2014. ***(4 Marks, May, 2014)***

Answer

Working Notes:

(i) $\frac{\text{Net Profit}}{\text{Capital}} = \frac{1}{4}$

$\frac{\text{Net Profit}}{25,00,000} = \frac{1}{4}$

Net Profit = 6,25,000

(ii) $\frac{\text{Net Profit}}{\text{Sale}} = 20\%$

Sale $= \frac{6,25,000}{0.20} = 31,25,000$

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

$25 = \frac{\text{Gross Profit}}{31,25,000} \times 100$

Gross Profit $= \frac{31,25,000 \times 25}{100}$

= 7,81,250

(iv) Stock Turnover $= \frac{\text{COGS}}{\text{Average Stock}}$

$$5 = \left(\frac{31,25,000 - 7,81,250}{\text{Average Stock}}\right)$$

$$\text{Average Stock} = \frac{23,43,750}{5}$$

$$= 4,68,750$$

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

$$4,68,750 = \frac{6,00,000 + \text{Opening Stock}}{2}$$

Opening Stock = 9,37,500 – 6,00,000 = 3,37,500

Trading A/c for the year ending 31st March, 2014

	₹		₹
To Opening Stock	3,37,500	By Sales	31,25,000
To Purchases (Balancing figure)	26,06,250	By Closing Stock	6,00,000
To Gross Profit c/f to P&L A/c	7,81,250		-
	37,25,000		37,25,000

Profit & Loss A/c for the year ending 31st March, 2014

	₹		₹
To Miscellaneous Expenses (balancing figure)	1,56,250	By Gross Profit b/f from Trading A/c	7,81,250
To Net Profit	6,25,000		-
	7,81,250		7,81,250

Question 25

Comment on the Debt Service Coverage Ratio. *(4 Marks, May, 2014)*

Answer

Comment on Debt Service Coverage Ratio (DSCR)

Debt service coverage ratio indicates the capacity of a firm to service a particular level of debt i.e. repayment of principal and interest. High credit rating firms target DSCR to be greater than 2 in its entire loan life. High DSCR facilitates the firm to borrow at the most competitive rates. Lenders are interested in this ratio to judge the firm's ability to pay off current interest and installments.

The debt service coverage ratio can be calculated as under:

$$\text{Debt Service Coverage Ratio} = \frac{\text{Earnings available for debt service}}{\text{Interest} + \text{Installments}}$$

$$\text{Or, Debt Service Coverage Ratio} = \frac{\text{EBITDA}}{\text{Interest} + \dfrac{\text{Principal Repayment Due}}{1-\text{Tc}}}$$

Question 26

From the following information, prepare Balance Sheet of a firm:

Stock Turnover Ratio (based on cost of goods sold)	-	*7 times*
Rate of Gross Profit to Sales	-	*25%*
Sales to Fixed Assets	-	*2 times*
Average debt collection period	-	*1.5 months*
Current Ratio	-	*2*
Liquidity Ratio	-	*1.25*
Net Working Capital	-	*₹ 8,00,000*
Net Worth to Fixed Assets	-	*0.9 times*
Reserve and Surplus to Capital	-	*0.25 times*
Long Term Debts	-	*Nil*

All Sales are on credit basis. *(8 Marks, November, 2014)*

Answer

Working Notes;

1. Net Working Capital = Current Assets – Current Liabilities

   = 2 - 1 = 1

   $$\text{Current Assets} = \frac{\text{Net Working Capital} \times 2}{1}$$

   $$= \frac{8,00,000 \times 2}{1}$$

   Current Assets =16,00,000

   Current Liabilities = 16,00,000 – 8,00,000 = 8,00,000

2. $$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

$$1.25 = \frac{\text{Current Assets - Stock}}{\text{Current Liabilities}}$$

$$1.25 = \frac{16,00,000 - \text{Stock}}{8,00,000}$$

1.25 x 8,00,000 = 16,00,000 – Stock

10,00,000 = 16,00,000 – Stock

Stock = 6,00,000

Liquid Assets = 1.25 x 8,00,000 = 10,00,000

3. Stock Turnover Ratio $= \frac{\text{COGS}}{\text{Stock}}$

$$7 = \frac{\text{COGS}}{6,00,000}$$

COGS = 42,00,000

4. Sales – Gross Profit = COGS

$$\frac{\text{Gross Profit}}{\text{Sales}} = 25\%$$

Gross Profit = 25% Sales

Sales – 25% Sales = COGS

$$\text{Sales} = \frac{42,00,000}{0.75} = 56,00,000$$

5. Debtors turnover Ratio $= \frac{12}{1.5} = 8$

$$\text{Debtors} = \frac{\text{Credit Sales}}{\text{Debtors Turnover}}$$

$$= \frac{56,00,000}{8} = 7,00,000$$

6. $\frac{\text{Sales}}{\text{Fixed Assets}} = 2$

$$\text{Fixed Assets} = \frac{56,00,000}{2} = 28,00,000$$

7. Net worth = Fixed Assets + Current Assets – Long-term Debt – Current Liabilities

= 28,00,000 + 16,00,000 – 0 – 8,00,000

= 36,00,000

8. $\frac{\text{Reserves \& Surplus}}{\text{Capital}} = 0.25$

Net worth = Reserves and Surplus + Capital

Capital = $\frac{36,00,000}{1.25} = 28,80,000$

Reserves and Surplus = 0.25 x 28,80,000

= 7,20,000

9. Cash = Liquid Assets – Debtors

= 10,00,000 – 7,00,000 = 3,00,000

10. Long Term Debts = Nil

Draft Balance Sheet

Liabilities	₹	Assets	₹
Share Capital	28,80,000	Fixed Assets	28,00,000
Reserves and Surplus	7,20,000	Current Assets:	
Long Term Debts	-	Stock	6,00,000
Current Liabilities	8,00,000	Debtors	7,00,000
	-	Cash	3,00,000
	44,00,000		44,00,000

(Note: *The above solution has been worked out by ignoring the Net worth to Fixed assets ratio given in the question in order to match the total of assets and liabilities in the Balance Sheet*).

UNIT – II : CASH FLOW AND FUNDS FLOW ANALYSIS

Question 1

Distinguish between Funds Flow Statement and Cash Flow Statement.

(3 Marks, May 2004; May 2010)

Answer

Differentiation between Funds Flow Statement and Cash Flow Statement

(a) Funds flow statement is based on the accrual accounting system. In case of preparation of cash flow statement all transactions affecting the cash equivalents only are taken into consideration.

(b) Funds flow statement analyses the sources and applications of funds which are long-term in nature and the net increase in long-term funds will be reflected on the working capital of the firm. The Cash flow statement will only consider the increase or decrease in current assets and current liabilities in calculating the cash flow of funds from operations.

(c) Funds flow analysis is more useful for long-range financial planning. Cash flow analysis is more useful for identifying and correcting the current liquidity problems of the firm.

(d) Funds flow statement tallies the funds generated from various sources with various uses to which they are put. Cash flow statement tallies difference between opening balance of cash and closing balance of cash by proceeding through sources and uses.

Question 2

The following is the income statement XYZ Company for the year 2004:

			(₹)
Sales			*1,62,700*
Add.: Equity In ABC Company's earning			*6,000*
			1,68,700
Expenses		₹	
Cost of goods sold		*89,300*	
Salaries		*34,400*	
Depreciation		*7,450*	
Insurance		*500*	
Research and development		*1,250*	

Patent amortisation		*900*	
Interest		*10,650*	
Bad debts		*2,050*	
Income tax:			
Current	*6,600*		
Deferred	*1,550*	*8,150*	
Total expenses			*1,54,650*
Net income			*14,050*

Additional information's are:

(i) 70% of gross revenue from sales were on credit.

(ii) Merchandise purchases amounting to ₹ 92,000 were on credit.

(iii) Salaries payable totaled ₹ 1,600 at the end of the year.

(iv) Amortisation of premium on bonds payable was ₹1,350.

(v) No dividends were received from the other company.

(vi) XYZ Company declared cash dividend of ₹4,000.

(vii) Changes in Current Assets and Current Liabilities were as follows:

	Increase/(Decrease) ₹
Cash	*500*
Marketable securities	*1,600*
Accounts receivable	*(7,150)*
Allowance for bad debt	*(1,900)*
Inventory	*2,700*
Prepaid insurance	*700*
Accounts payable (for merchandise)	*5,650*
Salaries payable	*(2,050)*
Dividends payable	*(3,000)*

Prepare a statement showing the amount of cash flow from operations. *(7 Marks, May, 2005)*

Answer

Statement showing cash flow from Operations

	₹	₹
Cash flow from operations		
Cash sales (30% × 1,62,700)	48,810	
Collection from debtors	1,20,890	
Total cash from operations		1,69,700
Uses of cash from operations		
Payment to suppliers	86,350	
Salaries expense	36,450	
Payment for insurance	1,200	
Research and development	1,250	
Interest payment	12,000	
Income tax payment	6,600	
Total operating cash payment		1,43,850
Net cash flow from operations		25,850

Notes

(1)

Collection from debtors	₹
Credit sales (70% × 1,62,700)	1,13,890
Less : Bad debts (2,050 less 1,900)	150
	1,13,740
Add : decrease in accounts receivables	7,150
Collection from debtors on credit sales	1,20,890

(2) Dividends earned ₹ 6,000 on equity of ABC Company has not been considered as it has not been received in cash.

(3) Payment to suppliers

Cost of goods sold	₹ 89,300
Add: Increase in inventory	2,700
Purchases	92,000
Less: increase in accounts payable	5,650

	Payment to suppliers	86,350
(4)	Calculation of salaries payment	
	Salary expense	₹ 34,400
	Add : decrease in salary payable	2,050
	Payment of salaries	₹ 36,450
(5)	Insurance payments	
	Insurance	₹ 500
	Add : increase in prepaid insurance	700
	Payment for insurance	₹ 1,200
(6)	Interest payment	
	Interest expenses	₹ 10,650
	Add : Amortisation of bond premium	1,350
	Interest payments	₹ 12,000
(7)	Income tax payments	
	Income tax expense	₹ 8,150
	Less: deferred tax	1,550
		₹ 6,600
	Changes in current tax payable	Nil
	Income tax payments	₹ 6,600

Question 3

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, 2006

		₹.
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 Account balance as on March 31, 2006		*16,38,000*

Balance Sheet as on

Assets	*March 31, 2005*	*March 31, 2006*
	(₹.)	*(₹.)*
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, 2005*	*March 31, 2006*
	(₹)	*(₹)*
Share Capital	*36,00,000*	*44,40,000*
Surplus in Profit and Loss Account	*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 2005-06 was ₹7,20,000.

(10 Marks, November, 2006)

Answer

Cash Flow Statement of Company A Ltd.

for the year ending March 31, 2006

Cash flows from Operating Activities

	₹
Net Profits before Tax and Extra-ordinary Item	16,00,000
Add: Depreciation	6,00,000
Operating Profits before Working Capital Changes	22,00,000
Increase in Debtors	(1,80,000)
Decrease in Stock	16,80,000
Increase in Advances	(12,000)
Decrease in Sundry Creditors	(60,000)
Increase in Outstanding Expenses	2,40,000
Cash Generated from Operations	38,68,000
Income tax Paid	8,68,000
Net Cash from Operations	30,00,000

Cash flows from Investment Activities

	₹
Purchase of Land	(4,80,000)
Purchase of Buildings and Equipment	(28,80,000)
Sale of Equipment	3,60,000
Net Cash used in Investment Activities	(30,00,000)

Cash flows from Financing Activities

		₹
Issue of Share Capital	8,40,000	
Dividends Paid	(7,20,000)	
Net Cash from Financing Activities		1,20,000
Net increase in Cash and Cash Equivalents		1,20,000
Cash and Cash Equivalents at the beginning		6,00,000
Cash and Cash Equivalents at the end		7,20,000

Buildings and Equipment Account

	₹		₹
Balance b/d	36,00,000	Sale of Asset	7,20,000
Cash/Bank (purchase) (Balancing figure)	28,80,000	Balance c/d	57,60,000
	64,80,000		64,80,000

Accumulated Depreciation on

Buildings and Equipment Account

	₹		₹
Sale of Asset		Balance b/d	12,00,000
(Accumulated depreciation)	4,80,000	Profit and Loss (Provisional)	6,00,000
Balance c/d	13,20,000		
	18,00,000		18,00,000

Sale of Asset Account

	₹
Original Cost	7,20,000
Less: Accumulated Depreciation	4,80,000
Net Cost	2,40,000
Profit on Sale of Asset	1,20,000
Sale Proceeds from Asset Sales	3,60,000

Income Tax Payable Account

	₹		₹
Bank A/c (b/f)	8,68,000	Balance b/d	1,20,000
Balance c/d	1,32,000	Provision for Tax A/c	8,80,000
	10,00,000		10,00,000

Question 4

The Balance Sheet of JK Limited as on 31st March, 2005 and 31st March, 2006 are given below:

Balance Sheet as on *(₹000)*

Liabilities	31.03.05	31.03.06	Assets	31.03.05	31.03.06
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		2,736	3,168
Profit and Loss Account	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:

(i) *During the year 2005-2006, Fixed Assets with a book value of ₹2,40,000 (accumulated depreciation ₹84,000) was sold for ₹1,20,000.*

(ii) *Provided ₹4,20,000 as depreciation.*

(iii) *Some investments are sold at a profit of ₹48,000 and Profit was credited to Capital Reserve.*

(iv) *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 31.03.05. The stock as on 31.03.06 was correctly valued at ₹3,60,000.*

(v) *It decided to write off Fixed Assets costing ₹60,000 on which depreciation amounting to ₹48,000 has been provided.*

(vi) *Debentures are redeemed at ₹105.*

Required:

Prepare a Cash Flow Statement. *(15 Marks, May, 2007)*

Answer

Cash flow Statement (31st March, 2006)

(A) Cashflows 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. w/o	48,000	
Fixed Assets w/o	12,000	12,56,400
Funds from Operation		12,99,600
Increase in Sundry Current Liabilities		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
Cash from Operating Activities		8,06,400

(B) Cash from Investing Activities

Purchases of fixed assets	(10,20,000)	
Sale of Investment	1,44,000	
Sale of Fixed Assets	1,20,000	(7,56,000)

(C) 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

Fixed Assets Account

	Particulars	₹		*Particulars*	₹
To	Balance b/d	27,36,000	By	Cash	1,20,000
To	Purchases (Balance)	10,20,000	By	Loss on sales	36,000
			By	Depreciation	4,20,000
			By	Assets w/o	12,000
			By	Balance	31,68,000
		37,56,000			37,56,000

Depreciation Account

	Particulars	₹		*Particulars*	₹
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	13,92,000			
		15,24,000			15,24,000

Question 5

The Balance Sheet of X Ltd. as on 31st March, 2007 is as follows:

Liabilities	₹('000)	Assets		₹('000)
Equity share capital	6,000	Fixed Assets (at cost)	16,250	
8% Preference share capital	3,250	Less: Depreciation written off	5,200	11,050
Reserves and Surplus	1,400	Stock		1,950
10% Debentures	1,950	Sundry debtors		2,600
Sundry Creditors	3,250	Cash		250
Total	15,850			15,850

The following additional information is available:

(i) *The stock turnover ratio based on cost of goods sold would be 6 times.*

(ii) *The cost of fixed assets to sales ratio would be 1.4.*

(iii) *Fixed assets costing ₹30,00,000 to be installed on 1st April, 2007, payment would be made on March 31, 2008.*

(iv) *In March, 2008, a dividend of 7 per cent on equity capital would be paid.*

(v) *₹5,50,000, 11% Debentures would be issued on 1st April, 2007.*

(vi) *₹30,00,000, Equity shares would be issued on 31st March, 2008.*

(vii) *Creditors would be 25% of materials consumed.*

(viii) *Debtors would be 10% of sales.*

(ix) *The cost of goods sold would be 90 per cent of sales including material 40 per cent and depreciation 5 per cent of sales.*

(x) *The profit is subject to debenture interest and taxation @ 30 per cent.*

Required:

(i) *Prepare the projected Balance Sheet as on 31st March, 2008.*

(ii) *Prepare projected Cash Flow Statement in accordance with AS-3.*

(15 Marks, November, 2007)

Answer

(i) Calculation of Sales

Fixed assets ₹(1,62,50,000 + 30,00,000) = 1,92,50,000

$$\text{Sales} = \frac{1,92,50,000}{1.4} = 1,37,50,000$$

Cost of goods sold	= 1,37,50,000 × .90	=	1,23,75,000
Material	= 1,37,50,000 × .40	=	55,00,000
Depreciation	= 1,37,50,000 × .05	=	6,87,500
Net profit	= 1,37,50,000 × .10	=	13,75,000

Calculation of Net Fixed Assets

		₹
Opening balance		1,62,50,000
Add: Purchases		30,00,000
		1,92,50,000
Less: Accumulated Depreciation	52,00,000	
Additional Depreciation	6,87,500	58,87,500
Closing balance of fixed assets		1,33,62,500

Calculation of Closing Stock

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

$$= \frac{1,23,75,000}{6} = 20,62,500$$

$$\text{Average stock} = \frac{(\text{Opening stock} + \text{Closing stock})}{2}$$

$$20,62,500 = \frac{(19,50,000 + \text{Closing stock})}{2}$$

Closing stock = 41,25,000 – 19,50,000 = 21,75,000

Calculation of Debtors = 1,37,50,000 × .10 = 13,75,000

Calculation of Creditors = 55,00,000 × .25 = 13,75,000

Calculation of Interest and Provision for Taxation

Net profit	13,75,000
Less: Interest (19,50,000 × 10%)	2,55,500
(5,50,000 × 11%)	11,19,500
Less: Taxes	3,35,850
Net profit available for dividend	7,83,650
Less: Preference share dividend	2,60,000
Less: Equity dividend @ 7%	4,20,000
Transfer to reserves and surplus	1,03,650

Reserves and Surplus

Opening balance	14,00,000

Add: Current balance	1,03,650
	15,03,650

(ii) Projected Cash Flow Statement

(a) Cash flow from Operating Activities

Profit after taxation		7,83,650
Depreciation added back		6,87,500
		14,71,150
Add: Increase in current liabilities and decrease in current assets		
Provision for taxation		3,35,850
Debtors (26,00,000 – 13,75,000)		12,25,000
Less: Increase in current assets and decrease in current liabilities		
Stock (21,75,000 – 19,50,000)	(2,25,000)	
Creditors (13,75,000 – 32,50,000)	(18,75,000)	(21,00,000)
Net Cash from Operating Activities		9,32,000

(b) Cash flow from Investing Activities

Purchase of Fixed Assets	(30,00,000)

(c) Cash flow from Financing Activities

Issue of Debenture	5,50,000	
Issue of equity share capital	30,00,000	
Dividend paid	(6,80,000)	28,70,000
Net increase in cash		8,02,000
Opening balance of cash		2,50,000
Closing balance		10,52,000

Projected Balance Sheet as on 31st March, 2008

Liabilities	*₹ ('000)*	*Assets*		*₹ ('000)*
Equity share capital	9,000	Fixed Assets (at cost)	19,250	
8% Preference share capital	3,250	Less: Depreciation written off	5,887.5	13,362.5

Reserves & Surplus	1,503.65	Stock		2,175
10% & 11% Debentures	2,500	Sundry debtors Cash		1,375 1,052
Sundry Creditors	1,375			
Provision for taxation	335.85			
Total	17,964.5	Total		17,964.5

Question 6

The Balance Sheets of a Company as on 31st March, 2008 and 2009 are given below:

Liabilities	*31.3.08* ₹	*31.3.09* ₹	*Assets*	*31.3.08* ₹	*31.3.09* ₹
Equity share capital	*14,40,000*	*19,20,000*	*Fixed assets*	*38,40,000*	*45,60,000*
Capital reserve	-	*48,000*	*Less: depreciation*	*11,04,000*	*13,92,000*
General reserve	*8,16,000*	*9,60,000*		*27,36,000*	*31,68,000*
Profit & Loss A/c	*2,88,000*	*3,60,000*	*Investment*	*4,80,000*	*3,84,000*
9% debentures	*9,60,000*	*6,72,000*	*Sundry debtors*	*12,00,000*	*14,00,000*
Sundry creditors	*5,50,000*	*5,90,000*	*Stock*	*1,40,000*	*1,84,000*
Bills payables	*26,000*	*34,000*	*Cash in hand*	*4,000*	-
Proposed dividend	*1,44,000*	*1,72,800*	*Preliminary Expenses*	*96,000*	*48,000*
Provision for tax	*4,32,000*	*4,08,000*			
Unpaid dividend	-	*19,200*			
	46,56,000	*51,84,000*		*46,56,000*	*51,84,000*

Additional information:

During the year ended 31st March, 2009 the company:

(i) Sold a machine for ₹.1,20,000; the cost of machine was ₹ 2,40,000 and depreciation provided on it was ₹ 84,000.

(ii) Provided ₹ 4,20,000 as depreciation on fixed assets.

(iii) Sold some investment and profit credited to capital reserve.

(iv) Redeemed 30% of the debentures @ 105.

(v) Decided to write off fixed assets costing ₹ 60,000 on which depreciation amounting to ₹ 48,000 has been provided.

You are required to prepare Cash Flow Statement as per AS 3. *(15 Marks, November, 2009)*

Answer

Cash Flow Statement for the year ending 31st March, 2009

(A) Cash Flows from Operating Activities

			₹
Profit and Loss A/c			
(3,60,000 – 2,88,000)			72,000
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 Debentures	14,400		
Proposed Dividend	1,72,800		
Preliminary Expenses written off	48,000		
Fixed Assets written off	12,000		
Interest on Debentures*	60,480		13,15,680
Funds from Operations			13,87,680
Increase in Sundry Creditors	40,000		
Increase in Bills Payable	8,000		
	48,000		
Increase in Sundry Debtors	(2,00,000)		
Increase in Stock	(44,000)		(1,96,000)
Cash before Tax			11,91,680
Less: Tax paid			4,32,000
Cash flows from Operating Activities			7,59,680

(B) Cash Flows 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)

(C) Cash Flows from Financing Activities

Issue of Share Capital		4,80,000	
Redemption of Debentures		(3,02,400)	
Dividend Paid (1,44,000 – 19,200)		(1,24,800)	
Interest on Debentures		(60,480)	(7,680)
Net increase in Cash and Cash Equivalents			(4,000)
Cash and Cash Equivalents at the beginning of the year			4,000
Cash and Cash Equivalents at the end of the year			NIL

** It is assumed that the 30 percent debentures have been redeemed at the beginning of the year.*

Fixed Assets Account

	Particulars	₹		*Particulars*	₹
To	Balance b/d	27,36,000	By	Cash	1,20,000
To	Purchases (Balance)	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

Question 7

The summarized Balance Sheets of XYZ Limited as at 31st March, 2010 and 2011 are given below:

Liabilities	*2010 (₹)*	*2011 (₹)*	*Assets*	*2010 (₹)*	*2011 (₹)*
Preference share capital	*4,00,000*	*2,00,000*	*Plant and Machinery*	*7,00,000*	*8,20,000*
Equity share capital	*4,00,000*	*6,60,000*	*Long term investment*	*3,20,000*	*4,00,000*

Share premium A/c	*40,000*	*30,000*	*Goodwill*	*-*	*30,000*
Capital redemption reserve	*-*	*1,00,000*	*Current Assets*	*9,10,000*	*11,41,000*
General reserve	*2,00,000*	*1,20,000*	*Short term investment (less than 2 months)*	*50,000*	*84,000*
P & L A/c	*1,30,000*	*1,75,000*	*Cash and Bank*	*1,00,000*	*80,000*
Current liabilities	*6,40,000*	*9,00,000*	*Preliminary expenses*	*40,000*	*20,000*
Proposed dividend	*1,60,000*	*2,10,000*			
Provision for tax	*1,50,000*	*1,80,000*			
	21,20,000	*25,75,000*		*21,20,000*	*25,75,000*

Additional information:

During the year 2011 the company:

(i) Preference share capital was redeemed at a premium of 10% partly out of proceeds issue of 10,000 equity shares of ₹ 10 each issued at 10% premium and partly out of profits otherwise available for dividends.

(ii) The company purchased plant and machinery for ₹ 95,000. It also acquired another company stock ₹ 25,000 and plant and machinery ₹ 1,05,000 and paid ₹ 1,60,000 in Equity share capital for the acquisition.

(iii) Foreign exchange loss of ₹ 1,600 represents loss in value of short-term investment.

(iv) The company paid tax of ₹ 1,40,000.

You are required to prepare cash flow statement. *(16 Marks, May, 2011)*

Answer

Preparation of Statement of Cash Flow for XYZ Limited

Cash flow statement as per AS 3 for the year ending 31st March, 2011

(a)	Cash flow from Operating Activities	₹	₹
	Profit before tax (2,75,000 + 1,70,000)	4,45,000	
	Add: Depreciation on machinery	80,000	
	Foreign exchange loss	1,600	
	Preliminary expenses written off	20,000	
	Cash flow before working capital adjustment	5,46,600	

	Add: Stock obtained on acquire	25,000	
	Increase in Current Liabilities	2,60,000	
	Less: Increase in current assets	(2,31,000)	
	Cash flow before tax paid	6,00,600	
	Less: Tax paid	(1,40,000)	
	Cash flow from operating activities		4,60,600
(b)	Cash flow from Investing Activities		
	Purchase of Machinery	(95,000)	
	Purchase of investment	(80,000)	(1,75,000)
(c)	Cash flow from Financing Activities		
	Issue of shares at premium	1,10,000	
	Payment of dividend	(1,60,000)	
	Redemption of preference shares at premium	(2,20,000)	(2,70,000)
	Net increase/decrease in cash and cash equivalent (a+b+c)		15,600
	Cash and cash equivalent at the beginning of the year		1,50,000
	Cash and cash equivalent at the end of the year		1,65,600

Working Notes:

1. Plant and Machinery Account

	₹		₹
To balance b/d	7,00,000	By depreciation	80,000
To bank	95,000		
To acquired from other	1,05,000	By balance c/f	8,20,000
	9,00,000		9,00,000

2. Provision for Tax Account

	₹		₹
To bank	1,40,000	By balance b/d	1,50,000
To balance c/f	1,80,000	By P & L	1,70,000
	3,20,000		3,20,000

3. Profit for the year 2011

	₹
P&L Account (1,75,000-1,30,000)	45,000
Transfer to general reserve (1,20,000+1,00,000 for redemption-opening 2,00,000)	20,000
Proposed dividend	2,10,000
Net Profit	2,75,000

4. Cash and Cash Equivalent

Opening balance + short term investment =1,00,000 + 50,000 = ₹ 1,50,000

Closing balance = Closing cash + short term investment + foreign exchange loss

= 80,000+84,000+1,600=₹ 1,65,600

Question 8

The Balance Sheet of X Ltd. as on 31-3-2011 and 31-3-2012 are as under:

Liabilities	*2011*	*2012*	*Assets*	*2011*	*2012*
Equity Share capital (₹ 10 each)	*18,00,000*	*22,00,000*	*Fixed Assets (Including machine)*	*20,50,000*	*18,75,000*
General Reserve	*7,50,000*	*6,00,000*	*Stock*	*7,10,000*	*8,95,000*
Security premium	*50,000*	*45,000*	*Debtors*	*7,25,000*	*9,80,000*
Profit & Loss A/c	*4,50,000*	*5,30,000*	*Cash Balance*	*1,25,000*	*1,80,000*
7% Debentures	*3,00,000*	*2,00,000*	*Preliminary Expense*	*35,000*	*25,000*
Creditors	*1,50,000*	*2,15,000*			
Provision for tax	*1,45,000*	*1,65,000*			
	36,45,000	*39,55,000*		*36,45,000*	*39,55,000*

Additional Information:

(i) Depreciation charged on fixed assets during the year was ₹ 2,05,000. An old machine costing ₹ 2,00,000 (WDV ₹ 80,000) was sold for ₹ 65,000 during the year.

(ii) Provisions for tax made during the year for ₹ 1,78,000.

(iii) On 1-4-2011 company redeemed debentures of ₹ 1,00,000 at a premium of 5%.

(iv) Company has issued fully paid bonus shares of ₹ 2,00,000 by capitalization of profit.

Prepare Cash Flow Statement. *(8 Marks, May, 2012)*

Answer

Cash flow Statement of X Ltd. for the year ending 31.03.2012

		(₹)	(₹)
(A)	Cash flow from Operating Activities :		
	Net Profit before Tax (80,000 + 50,000 + 1,78,000)	3,08,000	
	Add : Depreciation	2,05,000	
	Loss on Sale of Machine	15,000	
	Interest Paid on Debentures	14,000	
	Preliminary Expenses written off	10,000	
	Cash flow before working capital adjustments	5,52,000	
	(–) Increase in Stock	(1,85,000)	
	(–) Increase in Debtors	(2,55,000)	
	(+) Increase in Creditors	65,000	
	Cash flow from Operating Activities	1,77,000	
	Less : Tax paid	(1,58,000)	19,000
(B)	Cash flow from Investing Activities		
	Sale of Machine	65,000	
	Purchase of Fixed Assets	(1,10,000)	
	Net cash used in Investing activities		(45,000)
(C)	Cash flow from Financing activities		
	Issue of Equity Shares	2,00,000	
	Redemption of Debentures	(1,05,000)	
	Interest paid on Debentures	(14,000)	
	Net cash used in Financing Activities		81,000
	Net Increase in Cash and Cash Equivalent during year		55,000
	Add : Opening Balance of Cash		1,25,000
	Closing Balance of Cash		1,80,000

Working Notes:

Fixed Assets Account

To Balance b/d	20,50,000	By Bank	65,000

To Bank	1,10,000	By P&L a/c	15,000
		By Depreciation a/c	2,05,000
		By Balance c/d	18,75,000
	21,60,000		21,60,000

Provision for Tax

To Balance b/d	1,58,000	By balance c/d	1,45,000
To Bank	1,65,000	By P & L a/c	1,78,000
	3,23,000		3,23,000

General Reserve A/c

To Equity share capital a/c	2,00,000	By Balance b/d	7,50,000
To Balance c/d	6,00,000	By P & L a/c	50,000
	8,00,000		8,00,000

Question 9

The summarized Balances Sheets of MPS Limited as on 31-3-2012 and 31-3-2013 are as under:

Liabilities	*31-3-2012*	*31-3-2013*	*Assets*	*31-3-2012*	*31-3-2013*
	₹			₹	₹
Equity share capital	*40.00*	*50.00*	*Land & Building*	*27.00*	*25.00*
Securities Premium Account	-	*1.00*	*Plant & Machinery*	*25.00*	*34.00*
General Reserve	*8.00*	*11.00*	*Investments (Long Term)*	*3.00*	*8.00*
Profit & Loss Account	*10.30*	*12.70*	*Stock*	*7.50*	*9.80*
10% Debentures	*5.00*	*3.00*	*Debtors*	*9.25*	*11.15*
Sundry Creditors	*4.90*	*6.20*	*Bills Receivable*	*1.77*	*1.65*
Provision for Tax	*5.00*	*7.00*	*Cash & Bank Balance*	*4.50*	*7.70*
Proposed Dividend	*4.80*	*6.00*	*Preliminary Expenses*	*0.80*	*0.62*
Corporate Dividend Tax	*0.82*	*1.02*			
	78.82	*97.92*		*78.82*	*97.92*

Additional Information:

(i) On 1.4.2012, the company redeemed debentures of ₹ 2,00,000 at par.

(ii) During 2012-13 the company has issued equity shares for cash at a premium of 10%.

(iii) Provision for tax made during the year 2012-13 for ₹ 6,80,000.

(iv) Dividend received on investment ₹ 50,000 in July 2012.

(v) A machine costing ₹ 8,00,000 (WDV ₹ 1,20,000) was sold for ₹ 50,000 during the year 2012-13.

(vi) Depreciation for 2012-13 charged on plant & machinery ₹ 3,30,000 and ₹ 2,00,000 on land and building.

(vii) Proposed Dividend and Corporate Dividend Tax of 2011-12 paid during the year 2012-13.

Prepare a Cash Flow Statement as per Accounting Standard (AS)-3. *(10 Marks, May, 2013)*

Answer

Cash Flow Statement

		(₹ in lakhs)	(₹ in lakhs)
(A)	Cash Flow from Operating Activities		
	Profit and Loss A/c (12.70 – 10.30)	2.40	
	Add: General Reserves (11.00 – 8.00)	3.00	
		5.40	
	Add: Provision for tax	6.8	
		12.20	
	Add: Proposed dividend	6.00	
	Corporate dividend tax	1.02	
	Profit before tax	19.22	
	Add: Interest on debentures	0.30	
	Loss on Sale of Machinery	0.70	
	Depreciation on Plant & Machinery	3.30	
	Depreciation on Land & Building	2.00	
	Preliminary Expenses written off	0.18	
		25.70	
	Less: Dividend received on Investment	(0.50)	

	Cash flow before W/C adjustments	25.20	
	Less: Increase in Current Assets		
	Stock	(2.30)	
	Debtors	(1.90)	
		21.00	
	Add: Decrease in Current Assets		
	Bills receivables	0.12	
	Add: Increase in Current Liabilities		
	Sundry Creditors	1.30	
	Cash Generated from Operations	22.42	
	Less: Income tax paid		
	[(5.00+6.80) – 7.00]	(4.80)	
	Cash Flow from Operating Activities		17.62
(B)	Cash Flow from Investing Activities		
	Sale of Plant & Machinery	0.50	
	Purchase of Plant & Machinery	(13.50)	
	Purchase of Investment	(5.00)	
	Dividend Received on Investment	0.50	
	Cash Flow from Investing Activities		(17.50)
(C)	Cash Flow from Financing Activities		
	Issue of Share Capital	10.00	
	Securities Premium	1.00	
	Redemption of Debentures	(2.00)	
	Interest on debentures	(0.30)	
	Proposed Dividend	(4.80)	
	Corporate dividend tax	(0.82)	
	Cash flow from Financing Activities		3.08
	Net increase in Cash and Cash Equivalent (A+B+C)		3.20
	Cash and Cash equivalent at beginning of year		4.50
	Cash and Cash Equivalent at end of year		7.70

Working Notes:

Provision for Tax A/c

Particulars	Amount (₹)	Particulars	Amount (₹)
To Cash b/f	4.80	By Bal. b/d	5.00
To Balance c/d	7.00	By P/L	6.80
	11.80		11.80

Land & Building A/c

Particulars	Amount (₹)	Particulars	Amount (₹)
To Bal. b/d	27.00	By Depreciation	2.00
		By Balance c/d	25.00
	27.00		27.00

Plant & Machinery A/c

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance b/d	25.00	By Bank	0.50
To Bank b/f	13.50	By P/L	0.70
		By Depreciation	3.30
		By Balance c/d	34.00
	38.50		38.50

Question 10

The following are the Balance Sheets of Gama Limited for the year ending March 31, 2004 and March 31, 2005:

Balance Sheet

as on March, 31

		2004	*2005*
		₹	₹
Capital and Liabilities			
Share Capital		*6,75,000*	*7,87,500*
General Reserves		*2,25,000*	*2,81,250*
Capital Reserve (Profit on Sale of investment)		-	*11,250*
Profit & Loss Account		*1,12,500*	*2,25,000*

15% Debentures		*3,37,500*	*2,25,000*
Accrued Expenses		*11,250*	*13,500*
Creditors		*1,80,000*	*2,81,250*
Provision for Dividends		*33,750*	*38,250*
Provision for Taxation		*78,750*	*85,500*
	Total	*16,53,750*	*19,48,500*
Assets			
Fixed Assets		*11,25,000*	*13,50,000*
Less: Accumulated depreciation		*2,25,000*	*2,81,250*
Net Fixed Assets		*9,00,000*	*10,68,750*
Long-term Investments (at cost)		*2,02,500*	*2,02,500*
Stock (at cost)		*2,25,000*	*3,03,750*
Debtors (net of provision for doubtful debts of ₹45,000 and ₹56,250 respectively for 2004 and 2005 respectively)		*2,53,125*	*2,75,625*
Bills receivables		*45,000*	*73,125*
Prepaid Expenses		*11,250*	*13,500*
Miscellaneous Expenditure		*16,875*	*11,250*
		16,53,750	*19,48,500*

Additional Information:

(i) *During the year 2004-05, fixed assets with a net book value of ₹11,250 (accumulated depreciation, ₹33,750) was sold for ₹9,000.*

(ii) *During the year 2004-05, Investments costing ₹90,000 were sold, and also Investments costing ₹90,000 were purchased.*

(iii) *Debentures were retired at a Premium of 10%.*

(iv) *Tax of ₹61,875 was paid for 2003-04.*

(v) *During the year 2004-05, bad debts of ₹15,750 were written off against the provision for Doubtful Debt account.*

(vi) *The proposed dividend for 2003-04 was paid in 2004-05.*

Required:

Prepare a Funds Flow Statement (Statement of changes in Financial Position on working capital basis) for the year ended March 31, 2005. *(16 Marks, November, 2005)*

Answer

Computation of Funds from Operation

Profit and loss balance on March 31, 2005	₹2,25,000
Add: Depreciation	90,000
Loss on Sale of Asset	2,250
Misc. Expenditure written off	5,625
Transfer to Reserves	56,250
Premium on Redemption of debentures	11,250
Provision for Dividend	38,250
Provision for Taxation	68,625
	4,97,250
Less: P/L balance on March 31, 2004	1,12,500
Funds from operations	3,84,750

Accumulated Depreciation A/c

To Fixed Asset A/c	33,750	By Bal. b/d	2,25,000
		By P/L A/c	90,000
To Bal. c/d	2,81,250	(Pro (Prov. for dep.) (Bal. Fig.)	
	3,15,000		3,15,000

Fixed Assets A/c

To Bal. b/d	11,25,000	By Accumulated Depreciation A/c	33,750
		By Cash	9,000
To Bank (Purchase of Fixed Asset) (Bal. fig.)	2,70,000	By P/L (Loss on sale)	2,250
		By Bal. c/d	13,50,000
	13,95,000		13,95,000

Provision for Tax A/c

To Cash (tax paid)	61,875	By Bal. b/d	78,750
		By P/L A/c (Prov.)	
To Bal. c/d	85,500	(Bal. fig.)	68,625
	1,47,375		1,47,375

Statement of Changes in Working Capital

	March 31, 2004	*March 31, 2005*	*Change in W/C*	
Current Assets				
Stock	2,25,000	3,03,750	78,750	
Debtors	2,53,125	2,75,625	22,500	
Bills Receivables	45,000	73,125	28,125	
Prepaid Expenses	11,250	13,500	2,250	
	5,34,375	6,66,000	1,31,625	-
Less: Current liabilities				
Accrued Expenses	11,250	13,500	-	2,250
Creditors	1,80,000	2,81,250	-	1,01,250
	1,91,250	2,94,750	1,31,625	1,03,500
Working Capital	3,43,125	3,71,250	-	-
Increase in Working Capital	28,125	-		28,125
	3,71,250	3,71,250	1,31,625	1,31,625

Funds Flow Statement for the year ended March 31, 2005

Sources		₹
	Working Capital from Operations	3,84,750
	Sale of Fixed Assets	9,000
	Sale of Investments	1,01,250
	Share Capital Issued	1,12,500
	Total Funds Provided (A)	₹6,07,500
Uses		₹
	Purchase of Fixed Assets	2,70,000
	Purchase of Investments	90,000
	Payment of Debentures (at a premium of 10%)	1,23,750
	Payment of Dividends	33,750
	Payment of Taxes	61,875
	Total Funds Applied (B)	5,79,375
	Increase in Working Capital (A-B)	₹28,125

Question 11

The financial statement and operating results of PQR revealed the following position as on 31st March, 2006:

—	*Equity share capital (₹10 fully paid share)*	*₹20,00,000*
—	*Working capital*	*₹6,00,000*
—	*Bank overdraft*	*₹1,00,000*

—	*Current ratio*	*2.5 : 1*
—	*Liquidity ratio*	*1.5 : 1*
—	*Proprietary ratio (Net fixed assets/Proprietary fund)*	*.75 : 1*
—	*Cost of sales*	*₹14,40,000*
—	*Debtors velocity*	*2 months*
—	*Stock turnover based on cost of sales*	*4 times*
—	*Gross profit ratio*	*20% of sales*
—	*Net profit ratio*	*15% of sales*

Closing stock was 25% higher than the opening stock. There were also free reserves brought forward from earlier years. Current assets include stock, debtors and cash only. The current liabilities expect bank overdraft treated as creditors.

Expenses include depreciation of ₹90,000.

The following information was collected from the records for the year ended 31st March, 2007:

— *Total sales for the year were 20% higher as compared to previous year.*

— *Balances as on 31st March, 2007 were : Stock ₹5,20,000, Creditors ₹4,15,000, Debtors ₹4,95,000 and Cash balance ₹3,10,000.*

— *Percentage of Gross profit on turnover has gone up from 20% to 25% and ratio of net profit to sales from 15% to 16%.*

— *A portions of Fixed assets was very old (book values ₹1,80,000) disposed for ₹90,000. (No depreciations to be provided on this item).*

— *Long-term investments were purchased for ₹2,96,600.*

— *Bank overdraft fully discharged.*

— *Percentage of depreciation to Fixed assets to be provided at the rate in the previous year.*

Required:

(i) Prepare Balance Sheet as on 31st March, 2006 and 31st March, 2007.

(ii) Prepare the fund flow statement for the year ended 31st March, 2007.

(15 Marks, May, 2008)

Answer

Balance Sheets

Liabilities	31 March 2006 (₹)	31 March 2007 (₹)	Assets	31 March 2006 (₹)	31 March 2007 (₹)
Equity share capital (₹10 each fully paid)	20,00,000	20,00,000	Fixed Assets (₹.18,90,000– ₹.90,000)	18,00,000	15,39,000
Reserve and Surplus (balancing)	1,30,000	1,30,000	Long term investment	–	2,96,600
Profit & Loss A/c (15% of sales)	2,70,000	6,15,600	**Current Assets** (₹10,00,000)		
Current Liabilities			Stock	4,00,000	5,20,000
Bank Overdraft	1,00,000	–	Sundry Debtors	3,00,000	4,95,000
Creditors	3,00,000	4,15,000	Cash at Bank (Balancing)	3,00,000	3,10,000
Total	28,00,000	31,60,600	**Total**	28,00,000	31,60,600

Calculation for 31 March, 2006

(i) Calculation of Current Liabilities

Suppose that Current Liabilities = x, then current assets will be 2.5 x

Working capital = Current Assets – Current Liabilities

6,00,000 = 2.5x – x

x = 6,00,000 / 1.5 = ₹4,00,000 (C.L.)

Other Current Liabilities = Current Liabilities – Bank Overdraft

(Creditors) 4,00,000 – 1,00,000 = ₹3,00,000

Current Assets = 2.5 x 4,00,000 = ₹10,00,000

(ii) Liquid Ratio = Liquid Assets / Current Liabilities or 1.5 = Liquid Assets / 4,00,000 = ₹.6,00,000

Liquid assets = Current Assets – Stock

6,00,000 = 10,00,000 – Stock

So, Stock = ₹4,00,000

(iii) Calculation of fixed assets: Fixed assets to proprietary fund is 0.75, working capital is therefore 0.25 of proprietary fund. So, 6,00,000 / 0.25 x 0.75 = ₹18,00,000

(iv) Debtors = 2 / × 12 Sales

2 / 12 × 18,00,000 = ₹3,00,000

(v) Sales = (14,40,000 / 80) × 100 = ₹18,00,000

(vi) Net profit = 15% of ₹.18,00,000 = ₹2,70,000

Calculation for the year 31st March, 2007

(vii) Sales = 18,00,000 + (18,00,000 × 0.2) = 21,60,000

(viii) Calculation of fixed assets

	₹		₹
To Opening balance	18,00,000	By Banks (Sale)	90,000
		By Loss on sales of Fixed asset	90,000
		By P & L (Dep) (5% as in previous year)	81,000
		By Balance b/d	15,39,000
Total	18,00,000		18,00,000

(ix) Net profit for the year 2007, 16% × 21,60,000 = ₹3,45,600

Total Profit = 2,70,000 + 3,45,600 = ₹ 6,15,600

Calculation of fund from operation:

Net profit for the year 2007			= ₹3,45,600
Add:	Depreciation	₹81,000	
	Loss on sale of assets	₹90,000	= ₹1,71,000
Total			= ₹ 5,16,600

Fund Flow Statement

	₹		₹
Fund from operation	5,16,600	Increase in WC	3,10,000
Sales of fixed assets	90,000	Pur. of investment	2,96,600
	6,06,600		6,06,600

Schedule of changing working capital

	31 March 2006	31 March 2007	Increase (+)	Decrease (–)
	₹	₹	₹	₹
A. Current Assets				
Stock	4,00,000	5,20,000	1,20,000	
Sundry debtors	3,00,000	4,95,000	1,95,000	
Cash at bank	3,00,000	3,10,000	10,000	
	10,00,000	13,25,000		
B. Current Liabilities				
Bank overdraft	1,00,000	–	1,00,000	
Sundry creditors	3,00,000	4,15,000		1,15,000
	4,00,000	4,15,000		
Working capital	6,00,000	9,10,000	–	
Increase in working capital	3,10,000			3,10,000
	9,10,000	9,10,000	4,25,000	4,25,000

Question 12

Balance Sheets of a company as on 31st March, 2007 and 2008 were as follows:

Liabilities	*31.3.07*	*31.3.08*	*Assets*	*31.3.07*	*31.3.08*
	₹	₹		₹	₹
Equity Share Capital	*10,00,000*	*10,00,000*	*Goodwill*	*1,00,000*	*80,000*
8% P.S. Capital	*2,00,000*	*3,00,000*	*Land and Building*	*7,00,000*	*6,50,000*
General Reserve	*1,20,000*	*1,45,000*	*Plant and Machinery*	*6,00,000*	*6,60,000*
Securities Premium	*–*	*25,000*			
Profit and Loss A/c	*2,10,000*	*3,00,000*	*Investments*		
11% Debentures	*5,00,000*	*3,00,000*	*(non-trading)*	*2,40,000*	*2,20,000*
Creditors	*1,85,000*	*2,15,000*	*Stock*	*4,00,000*	*3,85,000*
Provision for tax	*80,000*	*1,05,000*	*Debtors*	*2,88,000*	*4,15,000*
Proposed Dividend	*1,36,000*	*1,44,000*	*Cash and Bank*	*88,000*	*93,000*

			Prepaid Expenses	*15,000*	*11,000*
			Premium on Redemption of Debentures	*–*	*20,000*
	24,31,000	*25,34,000*		*24,31,000*	*25,34,000*

Additional Information:

1. *Investments were sold during the year at a profit of ₹15,000.*
2. *During the year an old machine costing ₹80,000 was sold for ₹36,000. Its written down value was ₹45,000.*
3. *Depreciation charged on Plants and Machinery @ 20 per cent on the opening balance.*
4. *There was no purchase or sale of Land and Building.*
5. *Provision for tax made during the year was ₹96,000.*
6. *Preference shares were issued for consideration of cash during the year.*

You are required to prepare:

(i) Cash flow statement as per AS-3.

(ii) Schedule of Changes in Working Capital. *(15 Marks, November, 2008)*

Answer

(i) Cash Flow Statement

for the year ending 31st Mach, 2008

		₹	₹
A.	Cash flow from Operating Activities		
	Profit and Loss A/c as on 31.3.2008		3,00,000
	Less: Profit and Loss A/c as on 31.3.2007		2,10,000
			90,000
	Add: Transfer to General Reserve	25,000	
	Provision for Tax	96,000	
	Proposed Dividend	1,44,000	2,65,000
	Profit before Tax		3,55,000

	Adjustment for Depreciation:		
	Land and Building	50,000	
	Plant and Machinery	1,20,000	1,70,000
	Profit on Sale of Investments		(15,000)
	Loss on Sale of Plant and Machinery		9,000
	Goodwill written off		20,000
	Interest Expenses		33,000
	Operating Profit before Working Capital Changes		5,72,000
	Adjustment for Working Capital Changes:		
	Decrease in Prepaid Expenses		4,000
	Decrease in Stock		15,000
	Increase in Debtors		(1,27,000)
	Increase in Creditors		30,000
	Cash generated from Operations		4,94,000
	Income tax paid		(71,000)
	Net Cash Inflow from Operating Activities (a)		4,23,000
B.	Cash flow from Investing Activities		
	Sale of Investment		35,000
	Sale of Plant and Machinery		36,000
	Purchase of Plant and Machinery		(2,25,000)
	Net Cash Outflow from Investing Activities (b)		(1,54,000)
C.	Cash Flow from Financing Activities		
	Issue of Preference Shares		1,00,000
	Premium received on Issue of Securities		25,000
	Redemption of Debentures at premium		(2,20,000)
	Dividend paid		(1,36,000)
	Interest paid to Debenture holders		(33,000)
	Net Cash Outflow from Financing Activities (c)		(2,64,000)
	Net increase in Cash and Cash Equivalents during the year (a + b + c)		5,000
	Cash and Cash Equivalents at the beginning of the year		88,000
	Cash and Cash Equivalents at the end of the year		93,000

Working Notes:

1. *Provision for the Tax Account*

	₹.		₹.
To Bank (paid)	71,000	By Balance b/d	80,000
To Balance c/d	1,05,000	By Profit and Loss a/c	96,000
	1,76,000		1,76,000

2. *Investment Account*

	₹		₹
To Balance b/d	2,40,000	By Bank a/c (b/f)	35,000
To Profit and Loss (profit on sale)	15,000	By Balance c/d	2,20,000
	2,55,000		2,55,000

3. *Plant and Machinery Account*

	₹		₹
To Balance b/d	6,00,000	By Bank (sale)	36,000
To Bank a/c (Purchase b/f)	2,25,000	By Profit and Loss a/c (Loss on sale)	9,000
		By Depreciation	1,20,000
		By Balance c/d	6,60,000
	8,25,000		8,25,000

(Note: *Since the date of redemption of debentures is not mentioned in the question, therefore, it is assumed that the debentures are redeemed at the beginning of the year.)*

(ii) Schedule of Changes in Working Capital

Particulars	*31st March*		*Change in Working Capital*	
	2007	*2008*	*Increase*	*Decrease*
	₹	₹	₹	₹
Current Assets				
Stock	4,00,000	3,85,000	–	15,000
Debtors	2,88,000	4,15,000	1,27,000	–
Prepaid Expenses	15,000	11,000	–	4,000

Cash and Bank	88,000	93,000	5,000	–
Total (A)	7,91,000	9,04,000		
Current Liabilities				
Creditors	1,85,000	2,15,000	–	30,000
Total (B)	1,85,000	2,15,000		
Working Capital (A – B)	6,06,000	6,89,000		
Increase in Working Capital	83,000	—	—	83,000
	6,89,000	6,89,000	1,32,000	1,32,000

Question 13

Balance Sheets of RST Limited as on March 31, 2008 and March 31, 2009 are as under:

Liabilities	*31.3.2008 ₹*	*31.3.2009 ₹*	*Assets*	*31.3.2008 ₹*	*31.3.2009 ₹*
Equity Share Capital (₹10 face value per share)	*10,00,000*	*12,00,000*	*Land & Building*	*6,00,000*	*7,00,000*
General Reserve	*3,50,000*	*2,00,000*	*Plant & Machinery*	*9,00,000*	*11,00,000*
9% Preference Share Capital	*3,00,000*	*5,00,000*	*Investments (Long-term)*	*2,50,000*	*2,50,000*
Share Premium A/c	*25,000*	*4,000*	*Stock*	*3,60,000*	*3,50,000*
Profit & Loss A/c	*2,00,000*	*3,00,000*	*Debtors*	*3,00,000*	*3,90,000*
8% Debentures	*3,00,000*	*1,00,000*	*Cash & Bank*	*1,00,000*	*95,000*
Creditors	*2,05,000*	*3,00,000*	*Prepaid Expenses*	*15,000*	*20,000*
Bills Payable	*45,000*	*81,000*	*Advance Tax Payment*	*80,000*	*1,05,000*
Provision for Tax	*70,000*	*1,00,000*	*Preliminary Expenses*	*40,000*	*35,000*
Proposed Dividend	*1,50,000*	*2,60,000*			
	26,45,000	*30,45,000*		*26,45,000*	*30,45,000*

Additional information:

(i) Depreciation charged on building and plant and machinery during the year 2008-09 were ₹50,000 and ₹1,20,000 respectively.

(ii) During the year an old machine costing ₹1,50,000 was sold for ₹32,000. Its written down value was ₹40,000 on date of sale.

(iii) During the year, income tax for the year 2007-08 was assessed at ₹76,000. A cheque of ₹ 4,000 was received along with the assessment order towards refund of income tax paid in excess, by way of advance tax in earlier years.

(iv) Proposed dividend for 2007-08 was paid during the year 2008-09.

(v) 9% Preference shares of ₹3,00,000, which were due for redemption, were redeemed during the year 2008-09 at a premium of 5%, out of the proceeds of fresh issue of 9% Preference shares.

(vi) Bonus shares were issued to the existing equity shareholders at the rate of one share for every five shares held on 31.3.2008 out of general reserves.

(vii) Debentures were redeemed at the beginning of the year at a premium of 3%.

(viii) Interim dividend paid during the year 2008-09 was ₹50,000.

Required:

(a) Schedule of Changes in Working Capital; and

(b) Fund Flow Statement for the year ended March 31, 2009. *(15 Marks, June, 2009)*

Answer

(a) Schedule of Changes in Working Capital

Particulars	*31.3.08*	*31.3.09*	*Effect on Working Capital*	
			Increase	*Decrease*
	₹	₹	₹	₹
Current Assets:				
Stock	3,60,000	3,50,000	-	10,000
Debtors	3,00,000	3,90,000	90,000	-
Cash and Bank	1,00,000	95,000	-	5,000
Prepaid Expenses	15,000	20,000	5,000	-
Total (A)	7,75,000	8,55,000		

Current Liabilities:				
Creditors	2,05,000	3,00,000	-	95,000
Bills Payable	45,000	81,000	-	36,000
Total (B)	2,50,000	3,81,000		
Net Working Capital (A-B)	5,25,000	4,74,000	-	
Net Decrease in Working Capital	-	51,000	51,000	-
	5,25,000	5,25,000	1,46,000	1,46,000

(b) Funds Flow Statement for the year ended 31st March, 2009

Sources of Fund	₹
Funds from Operation	7,49,000
Issue of 9% Preference Shares	5,00,000
Sales of Plant & Machinery	32,000
Refund of Income Tax	4,000
Financial Resources Provided (A)	12,85,000
Applications of Fund	₹.
Purchase of Land and Building	1,50,000
Purchase of Plant and Machinery	3,60,000
Redemption of Debentures	2,06,000
Redemption of Preference Shares	3,15,000
Payment of Tax	1,05,000
Payment of Interim Dividend	50,000
Payment of Dividend (2007-08)	1,50,000
Financial Resources Applied (B)	13,36,000
Net Decrease in Working Capital (A - B)	51,000

Working Notes:

Estimation of Funds from Operation		₹
Profit and Loss A/c Balance on 31.3.2009		3,00,000
Add: Depreciation on Land and Building	50,000	

Depreciation on Plant and Machinery	1,20,000	
Loss on Sale of Plant and Machinery (40,000 – 32,000)	8,000	
Preliminary Expenses written off (40,000 – 35,000)	5,000	
Transfer to General Reserve	50,000	
Proposed Dividend	2,60,000	
Provision for Taxation	1,06,000	
Interim Dividend paid	50,000	
		6,49,000
		9,49,000
Less: Profit and Loss A/c balance on 31.3.08		2,00,000
Funds from Operation		7,49,000

Plant & Machinery A/c

	₹		₹
To Balance b/d	9,00,000	By Depreciation	1,20,000
To Bank (Purchase (Bal. Fig.)	3,60,000	By Bank (Sale)	32,000
		By P/L A/c (Loss on Sale)	8,000
		By Balance c/d	11,00,000
	12,60,000		12,60,000

Provision for Taxation A/c

	₹		₹
To Advance tax payment A/c	76,000	By Balance b/d	70,000
To Balance c/d	1,00,000	By P/L A/c (additional provision for 2007-08)	6,000
		By P/L A/c (Provision for 08-09)	1,00,000
	1,76,000		1,76,000

Advance Tax Payment A/c

	₹		₹
To Balance b/d	80,000	By Provision for taxation A/c	76,000
To Bank (paid for 08-09)	1,05,000	By Bank (Refund of tax)	4,000

		By Balance c/d	1,05,000
	1,85000		1,85,000

8% Debentures A/c

	₹		₹
To Bank (2,00,000 x 103%) (redemption)	2,06,000	By Balance b/d	3,00,000
To Balance c/d	1,00,000	By Premium on redemption of Debentures A/c	6,000
	3,06,000		3,06,000

9% Preference Share Capital A/c

	₹		₹
To Bank A/c (3,00,000 x 105%) (redemption)	3,15,000	By Balance b/d	3,00,000
To Balance c/d	5,00,000	By Premium on redemption of Preference shares A/c	15,000
		By Bank (Issue)	5,00,000
	8,15,000		8,15,000

Securities Premium A/c

	₹		₹
To Premium on redemption of debentures A/c	6,000	By Balance b/d	25,000
To Premium on redemption of preference shares A/c	15,000		
To Balance c/d	4,000		
	25,000		25,000

General Reserve A/c

	₹		₹
To Bonus to Shareholders A/c	2,00,000	By Balance b/d	3,50,000
To Balance c/d	2,00,000	By P/L A/c (transfer) b/f	50,000
	4,00,000		4,00,000

Land and Building A/c

	₹		₹
To Balance b/d	6,00,000	By Depreciation	50,000
To Bank (Purchase) (Bal. Fig.)	1,50,000	By Balance c/d	7,00,000
	7,50,000		7,50,000

Question 14

Balance Sheets of ABC Ltd as on March 31, 2009 and March 31, 2010 are as under:

Liabilities	*31.3.2009 ₹*	*31.3.2010 ₹*	*Assets*	*31.3.2009 ₹*	*31.3.2010 ₹*
Share Capital	*40,00,000*	*40,00,000*	*Land and Building*	*30,00,000*	*28,00,000*
General Reserve	*8,00,000*	*9,00,000*	*Plant and Machinery*	*36,00,000*	*35,00,000*
Profit and Loss A/c	*5,00,000*	*7,20,000*	*Investments (long-term)*	*8,00,000*	*7,44,000*
10% Debentures	*20,00,000*	*16,00,000*	*Stock*	*9,60,000*	*17,00,000*
Bank Loan (long-term)	*10,00,000*	*12,00,000*	*Debtors*	*12,00,000*	*15,96,000*
Creditors	*8,00,000*	*11,60,000*	*Prepaid Expenses*	*1,00,000*	*80,000*
Outstanding Expenses	*40,000*	*50,000*	*Cash and Bank*	*2,80,000*	*1,70,000*
Proposed Dividend	*6,00,000*	*7,20,000*			
Provision for Taxation	*2,00,000*	*2,40,000*			
	99,40,000	*1,05,90,000*		*99,40,000*	*1,05,90,000*

Additional Information:

(i) New machinery for ₹ 6,00,000 was purchased but an old machinery costing ₹ 2,90,000 was sold for ₹ 1,00,000 and accumulated depreciation thereon was ₹ 1,50,000.

(ii) 10% debentures were redeemed at 20% premium.

(iii) Investments (long term) were sold for ₹ 90,000 and its profit was transferred to general reserve.

(iv) Income-tax paid during the year 2009-10 was ₹ 1,60,000.

(v) An interim dividend of ₹ 2,40,000 has been paid during the year 2009-10.

(vi) Assume the provision for taxation as current liability and proposed dividend as non-current liability.

(vii) Investments (long-term) are non-trade investments.

Required:

(i) Schedule of changes in working capital

(ii) Funds flow from operations for the year ended March 31, 2010.

(8 Marks, November, 2010)

Answer

(i) Schedule of Changes in Working Capital:

	Particulars	*31st March*		*Working Capital*	
		2009 ₹	*2010* ₹	*Increase* ₹	*Decrease* ₹
(A)	Current Assets				
	Stock	9,60,000	17,00,000	7,40,000	
	Debtors	12,00,000	15,96,000	3,96,000	
	Prepaid Expenses	1,00,000	80,000		20,000
	Cash and Bank	2,80,000	1,70,000		1,10,000
	Total (A)	25,40,000	35,46,000		
(B)	Current Liabilities				
	Creditors	8,00,000	11,60,000		3,60,000
	Outstanding Expenses	40,000	50,000		10,000
	Provision for Taxation	2,00,000	2,40,000		40,000
	Total (B)	10,40,000	14,50,000		
	Working Capital (A) – (B)	15,00,000	20,96,000	11,36,000	5,40,000
	Increase in Working Capital	5,96,000			5,96,000
	Total	20,96,000	20,96,000	11,36,000	11,36,000

(ii) Funds flow from Operations for the year ended March 31, 2010

Adjusted Profit and Loss A/C

Particulars		₹	Particulars	₹
To General Reserve		66,000	By Balance b/d	5,00,000
To Depreciation:			By Funds from Operations (Balancing figure)	21,26,000
On Land & Building	2,00,000			
On Plant & Machinery	5,60,000	7,60,000		
To Loss on Sale of Machine		40,000		
To Premium on Redemption of Debentures		80,000		
To Proposed Dividend		7,20,000		
To Interim Dividend		2,40,000		
To Balance c/d		7,40,000		
		26,26,000		26,26,000

Working Notes:

(i) Depreciation on Land and Building = ₹ 30,00,000 – 28,00,000 = ₹ 2,00,000

(ii) Loss on Sale of Old Machine = ₹ 2,90,000 (Cost) –1,50,000 (Cum. Dep.) – 1,00,000 (Sale Value) = 40,000

(iii) Depreciation on Plant and Machinery

	₹		₹
To Balance b/d	36,00,000	By Bank a/c (sold)	1,00,000
To Bank a/c (Purchases)	6,00,000	By Profit & Loss a/c (Loss on Sales)	40,000
		By Depreciation (Balancing figure)	5,60,000
		By Balance c/d	35,00,000
	42,00,000		42,00,000

(iv) Premium on Redemption of Debentures

Amount of Debentures Redeemed = ₹ 20,00,000 − 16,00,000 = ₹ 4,00,000

Premium = 20% of 4,00,000 = ₹ 80,000

Question 15

Following are the summarized Balance Sheets of JKM Limited as on 31st March, 2011 and 2012 :

(₹ in lakhs)

Liabilities	*31st March*		*Assets*	*31st March*	
	2011	*2012*		*2011*	*2012*
	₹	*₹*		*₹*	*₹*
Equity Share Capital	*50.00*	*55.00*	*Goodwill*	*5.00*	*4.20*
Capital Reserve	*-*	*2.50*	*Land & Building*	*20.00*	*18.00*
General Reserve	*4.00*	*6.00*	*Plant & Machinery*	*22.00*	*31.00*
Profit & Loss Account	*5.30*	*6.70*	*Investment*	*2.00*	*3.50*
Proposed Dividend	*8.00*	*11.00*	*Stock*	*8.60*	*12.70*
Bills Payable	*2.00*	*1.80*	*Sundry Debtors*	*10.20*	*13.00*
Sundry Creditors	*3.50*	*4.60*	*Bills Receivables*	*1.00*	*0.70*
Provision for Tax	*4.00*	*5.00*	*Cash in hand & Bank*	*7.20*	*8.90*
			Share Issue Exp.	*0.80*	*0.60*
	76.80	*92.60*		*76.80*	*92.60*

Additional Information:

(i) A machine (original cost ₹ 2,80,000; Book Value ₹ 1,70,000) was sold during the year for ₹ 1,50,000.

(ii) Depreciation for 2011-12 was amounted to ₹ 3,00,000 on plant and machinery and ₹ 50,000 on land and building.

(iii) A piece of land had been sold out on 01-11-2011 and the profit on the sale has been credited in capital reserve.

(iv) ₹ 40,000 is received as dividend including ₹ 15,000 pre-acquisition profit, which is credited to investment account.

(v) An interim dividend of ₹ 2,50,000 has been paid during the year 2011-12.

(vi) Income tax paid during the year 2011-12, amounted to ₹ 3,80,000.

Required:

(A) Prepare a schedule of changes in the working capital.

(B) Prepare funds flow statement as on 31st March, 2012. *(12 Marks, November, 2012)*

Answer

(A) Schedule of Changes in the Working Capital

Particulars	31st March		Changes in Working Capital (in lakhs)	
	2011 (₹)	2012 (₹)	Increase (₹)	Decrease (₹)
A. Current Assets				
Stock	8.60	12.70	4.10	
Sundry Debtors	10.20	13.00	2.80	
Bills Receivables	1.00	0.70		0.30
Cash in Hand & Bank	7.20	8.90	1.70	
Total (A)	27.00	35.3		
B. Current Liabilities				
Sundry Creditors	3.50	4.60		1.10
Bills Payable	2.00	1.80	0.20	
Total (B)	5.5	6.4		
C. Working Capital (A-B)	21.5	28.9		
D. Increase in Working Capital	7.4			7.4
	28.9	28.9	8.8	8.8

(B) Preparation of Funds Flow Statement

Working Notes:

Plant & Machinery A/c

Particulars	₹	Particulars	₹
To Balance b/d	22.00	By Depreciation	3.00
To Bank (Purchase)	13.70	By Bank (Sale)	1.50

(Balancing figure)		By Loss on Sale	0.20
		By Balance c/d	31.00
	35.70		35.70

Provision for Taxation A/c

Particulars	₹	Particulars	₹
To Balance c/d	5.00	By Balance b/d	4.00
To Bank A/c	3.80	By P&L A/c (balancing figure)	4.80
	8.80		8.80

Investment A/c

Particulars	₹	Particulars	₹
To Balance b/d	2.00	By Dividend A/c	0.15
To Bank (purchase b/d)	1.65	By Balance c/d	3.50
	3.65		3.65

Land & Building A/c

Particulars	₹	Particulars	₹
To Balance b/d	20.00	By Bank A/c (Sale)	4.00
To Capital Reserve (Profit on Sale)	2.50	By Depreciation	0.50
		By Balance c/d	18.00
	22.50		22.50

Adjusted Profit & Loss A/c

Particulars	₹	Particulars	₹
To Depreciation on:		By Net Profit for 2011	5.30
Plant & Machinery	3.00	By Dividend on Investment	0.25
Land & Building	0.50	By Funds from Operation	26.15
To Loss on Sale of Machinery	0.20		
To Goodwill Written Off	0.80		
To Share Issue Up Written Off	0.20		
To Provision for Taxation	4.80		
To Transfer to General Reserves	2.00		

To Interim Dividend	2.50		
To Proposed Dividend	11.00		
By Net Profit for 2012	6.70		
	31.70		31.70

Funds Flow Statement as on 31st March 2012

Sources of Fund	₹	Application of Fund	₹
Funds from Operation	26.15	Increase in Working Capital	7.40
Dividend on Investment	0.40	Tax paid	3.80
Sale of Machinery	1.50	Interim Dividend	2.50
Issue of Shares	5.00	Dividend	8.00
Sale of Land	4.00	Purchase of Investments	1.65
		Purchase of Plant	13.70
	37.05		37.05

(**Note:** *Schedule of changes in the working capital may be computed alternatively by taking provision for tax as a current liability.)*

Question 16

The following are the summarized Balance Sheet of Flexon Limited as on 31st March 2012 and 2013 :

Liabilities	*31.3.12 ₹*	*31.3.13 ₹*	*Assets*	*31.3.12 ₹*	*31.3.13 ₹*
Share Capital	*8,00,000*	*8,00,000*	*Goodwill*	*15,000*	*15,000*
General Reserve	*1,40,000*	*1,80,000*	*Building*	*4,00,000*	*3,60,000*
Profit & Loss A/c.	*1,60,000*	*2,70,000*	*Plant*	*3,70,000*	*5,20,000*
Sundry Creditors	*1,71,000*	*1,67,000*	*Investment (Long-term)*	*1,20,000*	*1,50,000*
Bills Payable	*20,000*	*30,000*	*Stock*	*3,00,000*	*2,30,000*
Provision for Tax	*1,60,000*	*1,80,000*	*Debtors*	*1,80,000*	*2,00,000*
			Cash & Bank	*66,000*	*1,52,000*
	14,51,000	*16,27,000*		*14,51,000*	*16,27,000*

Additional Information:

(1) Depreciation charged during the year 2012-13:

On Plant - ₹40,000

On Building - ₹40,000

(2) Provision for tax of ₹1,90,000 was made during the year 2012-13.

(3) Interim dividend paid during the year 2012-13:

Interim Dividend - ₹ 80,000

Corporate Dividend Tax - ₹ 13,596

Prepare:

(i) Statement of changes in working capital

(ii) Funds flow statement for the year ended 31st March, 2013. *(8 Marks, November, 2013)*

Answer

(b) (i) Schedule of Changes in Working Capital

Particulars	31st March		Working Capital	
	2012 (₹)	2013 (₹)	Increase (₹)	Decrease (₹)
(A) Current Assets				
Stock	3,00,000	2,30,000	-	70,000
Debtors	1,80,000	2,00,000	20,000	-
Cash & Bank	66,000	1,52,000	86,000	-
Total (A)	5,46,000	5,82,000		
(B) Current Liabilities				
Sundry Creditors	1,71,000	1,67,000	4,000	-
Bills Payable	20,000	30,000	-	10,000
Total (B)	1,91,000	1,97,000		
Working Capital (A-B)	3,55,000	3,85,000	1,10,000	80,000
Increase in Working Capital	30,000	-	-	30,000
Total	3,85,000	3,85,000	1,10,000	1,10,000

Funds Flow Statement as on 31st March, 2013

Sources of Fund	₹	Application of Fund	₹
Funds from Operation	5,13,596	Increase in Working Capital	30,000
		Interim Dividend	80,000
		Purchase of Investment	30,000
		Corporate Dividend Tax	13,596
		Purchase of Plant	1,90,000
		Payment of Income Tax	1,70,000
	5,13,596		5,13,596

Working Notes:

Adjusted Profit and Loss A/c

Particulars		₹	Particulars	₹
To General Reserve		40,000	By Net Profit for 2012	1,60,000
To Depreciation:				
Plant	40,000		By Funds from Operations	5,13,596
Building	40,000	80,000		
To Goodwill		-		
To Interim Dividend		80,000		
To Corporate Dividend Tax		13,596		
To Provision for Tax		1,90,000		
To Net Profit for 2013		2,70,000		
		6,73,596		6,73,596

Provision for Tax A/c

Particulars	₹	Particulars	₹
To Bank A/c (Tax Paid)	1,70,000	By Bal. b/d	1,60,000
To Balance b/d	1,80,000	By P&L A/c	1,90,000
	3,50,000		3,50,000

Plant & Machinery A/c

Particulars	₹	Particulars	₹
To Bal. b/d	3,70,000	By Depreciation	40,000
To Bank	1,90,000	By Bal. c/d	5,20,000
	5,60,000		5,60,000

(**Note**: *Schedule of changes in the working capital maybe computed alternatively by taking provision for tax as current liability and working out the problem accordingly.)*

Question 17

The Balance Sheets of Z Ltd. as on 31st March, 2013 and 31st March, 2014 are as under:

Liabilities	*2013*	*2014*	*Assets*	*2013*	*2014*
	₹	*₹*		*₹*	*₹*
Equity share capital	*15,00,000*	*20,00,000*	*Goodwill*	*5,75,000*	*4,50,000*
12% Redeemable pref. share cap.	*7,50,000*	*5,00,000*	*Land & Building*	*10,00,000*	*8,50,000*
General Reserve	*2,00,000*	*3,50,000*	*Plant*	*4,00,000*	*10,00,000*
Profit & Loss A/c	*1,50,000*	*2,40,000*	*Debtors*	*8,00,000*	*12,60,000*
Creditors	*2,75,000*	*4,15,000*	*Stock*	*4,85,000*	*4,35,000*
Outstanding Expenses	*1,00,000*	*80,000*	*Marketable Securities*	*75,000*	*50,000*
Provision for Tax	*2,00,000*	*2,50,000*	*Cash and Bank*	*50,000*	*40,000*
Proposed Dividend	*2,10,000*	*2,50,000*			
	33,85,000	*40,85,000*		*33,85,000*	*40,85,000*

Additional Information:

(i) *Depreciation charged on Plant and Land & Buildings during the year was ₹ 50,000 and ₹ 1,00,000 respectively.*

(ii) *Income-Tax ₹ 1,75,000 was paid during the year 2013-14.*

(iii) *An Interim Dividend of ₹ 1,00,000 has been paid in 2013-14.*

Prepare Cash Flow Statement. *(8 Marks, May, 2014)*

Answer

Cash Flow Statement for the year ending 31st March, 2014

		₹	₹
A.	Cash flow from Operating Activities		
	Profit and Loss A/c as on 31.3.2014		2,40,000
	Less: Profit and Loss A/c as on 31.3.2013		(1,50,000)
			90,000
	Add: Transfer to General Reserve	1,50,000	
	Provision for Tax	2,25,000	
	Interim Dividend paid during the year	1,00,000	

	Proposed Dividend	2,50,000	7,25,000
	Profit before Tax		8,15,000
	Adjustment for Depreciation:		
	Land and Building	1,00,000	
	Plant and Machinery	50,000	1,50,000
	Goodwill written off		1,25,000
	Operating Profit before Working Capital Changes		10,90,000
	Adjustment for Working Capital Changes:		
	Decrease in Outstanding Expenses	(20,000)	
	Decrease in Stock	50,000	
	Increase in Debtors	(4,60,000)	
	Increase in Creditors	1,40,000	(2,90,000)
	Cash generated from Operations		8,00,000
	Income tax paid		(1,75,000)
	Net Cash Inflow from Operating Activities (a)		6,25,000
B.	Cash flow from Investing Activities		
	Proceeds from Sale of Building		50,000
	Purchase of Plant and Machinery		(6,50,000)
	Net Cash Outflow from Investing Activities (b)		(6,00,000)
C.	Cash Flow from Financing Activities		
	Proceeds from Issuance of Share Capital		5,00,000
	Redemption of Preference Shares		(2,50,000)
	Interim Dividend Paid		(1,00,000)
	Final Dividend Paid		(2,10,000)
	Net Cash Outflow from Financing Activities (c)		(60,000)
	Net increase in Cash and Cash Equivalents during the year (a+b+c)		(35,000)
	Cash and Cash Equivalents at the beginning of the year (Cash and Bank and Marketable Securities)		1,25,000
	Cash and Cash Equivalents at the end of the year		90,000

Working Notes:

1. Provision for the Tax Account

	₹		₹
To Bank (paid)	1,75,000	By Balance b/d	2,00,000

To	Balance c/d	2,50,000	By	Profit and Loss a/c	2,25,000
		4,25,000			4,25,000

2. Plant and Machinery Account

		₹			₹
To	Balance b/d	4,00,000	By	Depreciation	50,000
To	Bank a/c (Purchases) (Balancing figure)	6,50,000	By	Balance c/d	10,00,000
		10,50,000			10,50,000

3. Land and Building Account

		₹			₹
To	Balance b/d	10,00,000	By	Depreciation	1,00,000
			By	Bank a/c (Sales) (Balancing figure)	50,000
			By	Balance c/d	8,50,000
		10,00,000			10,00,000

(**Note:** In the above solution it has been assumed that marketable securities have insignificant risk of changes in value.)

Question 18

Balance Sheets of Star Ltd. are as under:

Balance Sheet *(in lakh ₹)*

Liabilities	*31/03/13 ₹*	*31/03/14 ₹*	*Assets*	*31/03/13 ₹*	*31/03/14 ₹*
Share Capital	*24.00*	*30.00*	*Plant & Machinery*	*15.00*	*21.00*
Reserve	*4.50*	*6.00*	*Buildings*	*12.00*	*18.00*
Profit & Loss A/c	*1.80*	*3.00*	*Investments*	*-*	*3.00*
Debentures	*-*	*6.00*	*Sundry Debtors*	*21.00*	*15.00*
Provision for Taxation	*2.10*	*3.00*	*Stock*	*6.00*	*12.00*
Proposed Dividend	*3.00*	*6.00*	*Cash in hand/Bank*	*6.00*	*6.00*
Sundry Creditors	*24.60*	*21.00*			
Total	*60.00*	*75.00*		*60.00*	*75.00*

With the help of following additional information, prepare Cash Flow Statement:

(i) Depreciation on plant and machinery was charged @ 25% on its opening balance and on building @ 10% on its opening balance.

(ii) *During the year an old machine costing ₹ 1,50,000 (written down value ₹ 60,000) was sold for ₹ 1,05,000.*

(iii) *₹ 1,50,000 was paid towards Income-tax, during the year.* ***(8 Marks, November, 2014)***

Answer

Cash Flow Statement for the year ending on March 31, 2014

		₹ *in lakhs*	₹ *in lakhs*
I.	Cash flows from Operating Activities		
	Net profit made during the year (W.N.1)	8.70	
	Provision for taxation made during the year	2.40	
	Profit on sale of machinery	(0.60)	
	Adjustment for depreciation on Machinery (W.N.2)	3.75	
	Adjustment for depreciation on Land & Building	1.20	
	Operating profit before change in Working Capital	15.45	
	Increase in Inventory	(6.00)	
	Decrease in Debtors	6.00	
	Decrease in Creditors	(3.60)	
	Cash generated from operations	11.85	
	Income-tax paid	(1.50)	
	Net cash from operating activities		10.35
II.	Cash flows from Investing Activities		
	Purchase of Machinery	(10.20)	
	Sale of Machinery	1.05	
	Purchase of Building	(7.20)	
	Purchase of investments	(3.00)	
			(19.35)
III.	Cash flows from Financing Activities		
	Issue of shares	6.00	
	Issue of debentures	6.00	
	Dividend paid	(3.00)	9.00
Net increase in cash and cash equivalent			Nil
Cash and cash equivalents at the beginning of the period			6.00
Cash and cash equivalents at the end of the period			6.00

Working Notes:

(i) Net Profit made during the year ended 31.3.2014

		₹ *in lakhs*
Increase in P & L (Cr.) Balance		1.20
Add:	Transfer to general reserve	1.50
Add:	Provided for proposed dividend during the year	6.00
		8.70

(ii) Plant & Machinery Account

		₹ *in lakhs*			₹ *in lakhs*
To	Balance b/d	15.00	By	Depreciation (Bal. Fig.) [25% of 15]	3.75
To	P& L A/c [1.05 less 0.45 (0.60 less depreciation 0.15)]	0.60	By	Cash/Bank A/c	1.05
To	Cash/Bank (balancing fig.)	10.20	By	Balance c/d	21.00
		25.80			25.80

(iii) Provision for Taxation Account

		₹ *in lakhs*			₹ *in lakhs*
To	Cash/Bank (Bal. Fig.)	1.50	By	Balance b/d	2.10
To	Balance c/d	3.00	By	P & L A/c	2.40
		4.50			4.50

(iv) Proposed Dividend Account

		₹ *in lakhs*			₹ *in lakhs*
To	Bank	3.00*	By	Balance b/d	3.00
To	Balance c/d	6.00	By	P & L A/c (Bal. Fig.)	6.00
		9.00			9.00

* *last year's proposed dividend assumed to be paid this year.*

(v) Building Account

		₹ *in lakhs*			₹ *in lakhs*
To	Balance b/d	12.00	By	Depreciation	1.20
To	Bank A/c (Purchase)	7.20	By	Balance c/d	18.00
		19.20			19.20