PRACTICAL PROBLEMS

Problem 1

Consider the following information:

Accounts payable	Rs 100	Marketable securities	50
Accounts receivable	400	Notes payable	50
Accrued wages	100	Other accruals	50
Accumulated depreciation	800	Paid in capital	300
Cash	100	Preferred stock	100
Common stock (Rs 1par)	200	Retained earning	700
Deferred taxes	150	Treasury stock	100
Gross property and plant	2,000	Inventories	400
Long term debt	500		

Required: Balance sheet

Adopted from Weston and Copeland 2.1

Total assets = Rs. 2,150

Problem 2

Papa Roach Exterminators, Inc., has sales of Rs. 432,000, costs of Rs. 210,000, depreciation expense of Rs. 25,000, interest expenses of Rs. 8,000 and a tax rate of 35 percent.

i. What is the net income for this firm?

ii. Suppose the firm paid out Rs. 65,000in cash dividends, what is the addition to retained earnings?

iii. Suppose the firm had 30,000 shares of common stock outstanding, what are the earnings per share, or EPS, figure? What is the dividend per share figure?

Adopted from Ross, Westerfield and Jordon 2.2

Net income Rs 122,850; EPS Rs 4.10 and DPS Rs 2.17

Problem 3

Consider the following information:

Sales	Rs 450,000	Cost of goods sold	2,30,000
Office expenses	50,000	Selling expenses	25,000
Depreciation	15,000	Interest	10,000
Tax rate	40 %	Number of common stocks	12,000

Required: (i) Income statement (ii) Earning per share

✍ Net income Rs 72,000 and EPS Rs 6.00

Problem 4

Consider the following information

Sales	Rs 190,000	Material	Rs. 60,000
Labour	30,000	Heat, light, power	6,000
Indirect labour	11,000	Depreciation	12,000
Selling expenses	20,000	Interest	2,500
Office expenses	11,000	Tax rate	50 %

Required: Income statement to determine net income

✍ Net income Rs 18,750

Problem 5

Klingon Widgets purchases new cloaking machinery three years ago for Rs. 5 million. The machinery can be sold to the Romulans today for Rs. 1.5million. Klingon's current balance sheet shows net fixed assets of Rs. 1,600,000, current liabilities of Rs. 1,800,000, and net working capital of Rs. 900,000. If all the current assets were liquidated today, the company would receive Rs. 2.9 million cash.

i. What is the book value of Klingon's assets today?

ii. What is the market value?

Adopted from Ross, Westerfield and Jordon

✍ (i) Rs. 43,00,000 (ii) Rs. 44,00,000

Problem 6

Gonas, Inc., has been sales of Rs.9,750, costs of Rs. 5,740, depreciation expense of Rs. 1,000 and interest expense of Rs. 240. if the tax rate is 35 percent, what is the operating cash flow or OCF?

Adopted from Ross, Westerfield and Jordon

✍ Rs. 2,956.50

Problem 7

The December 21, 2001 balance sheet of Venu's Tennis Shop showed current assets of Rs.1,200 and current liabilities of Rs.720. The December 31, 2002, balance sheet showed current assets of Rs.1,440 and current liabilities of Rs.525. What was the company's 2002 change in net working capital or NWC?

Adopted from Ross, Westerfield and Jordon

✍ 435

Problem 8

Consider the following information Kailai Corporation:

Notes payable	Rs 50,000	Deferred taxes	150,000
Accruals	150,000	Common stock	9,00,000
Paid in capital	300,000	Cash	800,000
Preferred stock	100,000	Acc. Depreciation	800,000

Retained earning	500,000	Account receivables	400,00
Account payables	100,000	Long term debt	500,00
Inventory	400,000	Marketable securities	150,00
Gross plant	18,00,000		

Required: Balance sheet

Total of balance sheet Rs 27,50,000

Problem 9

The Goldstone Company has reported the following income and expense items for 20x3 and 20x4.

Year	20x3	20x4
Revenues	Rs 40,000	45,000
Cost of sales (excl. dep.)	20,000	20,000
Marketing expenses	6,000	6,500
General administrative expense	1,800	1,800
Depreciation	1,200	2,000
Interest expense	5,000	10,000
Tax rate	40%	34%
Accrued tax paid	2,000	1,000

Required:

(i) Prepare income statement for 20x3 and 20x4.

(ii) What is Goldstone's operating cash flow for each year?

(iii) Discuss the difference between net income and operating cash flow.

Adopted from Weston and Copeland 2

(i) Rs. 3,600; Rs. 3,402 (ii) Rs. 10,200; Rs. 15,700

OFC = EBIT − Tax paid

Problem 10

The Roark Corporation has Rs 2,000,000 in long term debt with an interest rate of 12 %, and no other interest bearing debt . It had net revenue of Rs 4,000,000 in 19x6, and its cost of sales (excluding depreciation) was Rs 1,800,000. Depreciation expense was Rs 135,000. Marketing and general expenses were Rs 250,000. From investments it had made in other companies, Roark had income of Rs 100,000 net of expenses. Roark uses a 34 % tax rate in reports to shareholders; its actual rate is 25 %.

(i) What is Roark's gross income for 19x6?

(ii) What is the net operating income?

(iii) What are the earning before interest and tax¿

(iv) What is its net income?

(v) What is its operating cash flow?

(i) Rs. 22,00,000 (ii) Rs 18,15000; (iii) Rs. 19,15,000; (iv) Rs. 11,05,500; (v) Rs 16,31,250

17,96,250

Adopted from Weston and Copeland 2

Problem 11

Little Books Inc. recently reported net income of Rs 3 million. Its operating income (EBIT)was Rs 6 million, and the company pays a 40 percent tax rate. What was the company's interest expense for the year?

Rs 1000,000

Adopted from Brigham and Houston 2

Problem 12

Kendall Corners Inc. recently reported net income of Rs 3.1 million. The company's depreciation expense was Rs 500,000. What is the company's approximate net cash flow? Assume the firm has no amortization expense.

Adapted from Brigham and Houston 2.2

- Rs 36,00,000

Problem 13

Kendall Company recently reported Rs 150,000 in operating income (EBIT). The company's capital consists of Rs 300,000 in long-term debt, which has a 6 percent after tax cost and Rs 500,000 in common equity. Kendall's risk, its shareholders require a 15 percent return on their capital. The Company is in the 40 percent tax bracket. What is Kendall's EVA?

Adapted from Brigham and Houston 2.9

- Rs 9,000

Problem 14

The Llaven Corporation has operating income (EBIT) of Rs 750,000. The company's depreciation expense is Rs 200,000. Klaven is 100 percent equity financed, and it faces a 40 percent tax rate. What are the company's net income, its net cash flow, and its operating cash flow?

Adapted from Brigham and Houston 2.11

- NI Rs 450,000 NCF Rs 650,000 OCF Rs 650,000

Problem 15

Last year Ratmer Robotics had Rs 5 million in operating income (EBIT). The company had a net depreciation expense of Rs 1 million and an interest expense of Rs 1 million; its corporate tax rate was 40 percent. The company has Rs 14 million in current assets and Rs 4 million in non-interest-bearing current liabilities; it has Rs 15 million in net plant and equipment. It estimates that it has an after-tax cost of capital of 10 percent. Assume that Ratmer's only non-cash item was depreciation.

(i) What was the company's net income for the year?
(ii) What was the company's net cash flow?
(iii) What was the company's net operating profit after taxes (NOPAT)?
(iv) What was the company's operating cash flow?
(v) If operating capital in the previous year was Rs 24 million what was the company's free cash flow (FCF) for the year?
(vi) What was the company's Economic Value Added (EVA)?

Adapted from Brigham and Houston ST-2

- a. NI = Rs 24,00,000 b. NCF = Rs 34,00,000 c. NOPAT = Rs 30,00,000 d. OCF = Rs 40,00,000 e. FCF = Rs 20,00,000 f. EVA = Rs 500,000

Problem 16

Svoboda Corporation comparative balance sheets at December 31 (Rs in millions)

Assets	X1	X2	Liabilities	X1	X2
Cash & equivalents	9	3	Notes payable	20	0
Accounts receivable	15	22	Accounts payable	5	8
Inventories	12	15	Accrued wages	2	2
Fixed assets, net	50	55	Accrued taxes	3	5
Other assets	8	5	Long-term debt	0	15

Total		Rs 48

Svoboda Corporation statement of income and retained earnings for the year ended December 31, x2 (in millions)

Net sales	Rs 25	
Expenses	5	
Cost of goods sold	5	
Selling, general, and administrative expenses	2	32
Depreciation		11
Interest		4
Net income before taxes 16.5		7
Less: Taxes		42
Net income		47
Add: Retained earnings at 12/31/x1		3
Subtotal		44
Less: Dividends		
Retained earnings at 12/31/x2		

a. Prepare a statement of cash flows for X2 using the direct method for the Svoboda Corporation.

b. Prepare flow of funds (sources and uses of funds) statement for X2 for the Svoboda Corporation using indirect method.

Adopted from Vanhorne 12

c. Rs 43,000,000

Problem 17

The consolidated balance sheets for the Lloyd Lumber Company at the beginning and end of 1995 follow. The company bought Rs 50 million worth of fixed assets. The charge for depreciation in 1995 was Rs 10 million. Earnings after taxes were Rs 33 million, and the company paid out Rs 5 million in dividends.

a. Fill in the amount of source or use in the appropriate column.

Lloyd Lumber Company: Balance Sheets at Beginning and End of 1995 (in millions)

	Jan 1	Dec. 31	Change Source	Change Use
Cash	Rs 7	Rs 15	____	____
Marketable security	Rs 0	Rs 11	____	____
Net receivable	Rs 30	Rs 22	____	____
Inventories	Rs 53	Rs 75	____	____
Total current assets	**Rs 90**	**Rs 123**	____	____
Gross fixed assets	Rs 75	Rs 125	____	____
Less Accumulated depreciation	25	35	____	____
Net fixed assets	Rs 50	Rs 90	____	____
Total assets	Rs 140	Rs 213	____	____
Accounts payable	Rs 18	Rs 15	____	____
Notes payable	3	15	____	____
Other current liabilities	Rs 13	Rs 7	____	____
Long term debt	Rs 8	Rs 24	____	____
Common stock	Rs 25	Rs 37	____	____

			Common stock	40	44
			Retained earnings	90	100
Total	90	100	Total		

Svoboda Corporation statement of income and retained earnings, year ended December 31, ×2 (in millions)

Net sales		Rs 48
Expenses :		
Cost of goods sold	Rs 25	
Selling, general, and administrative expenses	5	
Depreciation	5	
Interest	2	37
Net income before taxes E.B.T		11
Less: Taxes		4
Net income		7
Add: Retained earnings at 12/31/×1		40
Subtotal		47
Less: Dividends		3
Retained earnings at 12/31/×2		44

a. Prepare a statement of cash flows for X2 using the direct method for the Svoboda Corporation.

b. Prepare flow of funds (sources and uses of funds) statement for X2 for the Svoboda Corporation using indirect method.

Adopted from Vanhorne 7.2

A/Rs 43,000,000

Problem 17

The consolidated balance sheets for the Lloyd Lumber Company at the beginning and end of 1995 follow. The company bought Rs 50 million worth of fixed assets. The charge for depreciation in 1995 was Rs 10 million. Earnings after taxes were Rs 33 million, and the company paid out Rs 5 million in dividends.

a. Fill in the amount of source or use in the appropriate column.

Lloyd Lumber Company: Balance Sheets at Beginning and End of 1995 (in millions)

	Jan 1	Dec. 31	Change Source	Change Use
Cash	Rs 7	Rs 15		
Marketable security	Rs 0	Rs 11		
Net receivable	Rs 30	Rs 22		
Inventories	Rs 53	Rs 75		
Total current assets	**Rs 90**	**Rs 123**		
Gross fixed assets	Rs 75	Rs 125		
Less Accumulated depreciation	25	35		
Net fixed assets	Rs 50	Rs 90		
Total assets	Rs 140	Rs 213		
Accounts payable	Rs 18	Rs 15		
Notes payable	3	15		
Other current liabilities	Rs 15	Rs 7		
Long term debt	Rs 8	Rs 24		
Common stock	Rs 29	Rs 57		

Retained earning	Rs 67	Rs 95
Total liabilities and equity	**Rs 140**	**Rs 213**

Notes : Total sources must equal total uses

b. Prepare a statement of cash flows.

Adopted from Weston and Brigham 3.12

a. Total Sources = Total uses = Rs 102 million; b. Net cash flow from operations = Rs 18, Net cash flow from financing = Rs 51

Problem 18

The Nelson Electronic Corporation's (NEC) balance sheets for 1989 and 1988 (in millions) are as follows:

	1989	1988
Cash	Rs 21	Rs 45
Marketable securities	0	33
Receivables	90	66
Inventories	225	159
Total current assets	**Rs 336**	**Rs 303**
Gross fixed assets	450	225
Less accumulated depreciation	123	78
Net fixed assets	Rs 327	Rs 147
Total assets	**Rs 663**	**Rs 450**
Accounts payable	Rs 54	Rs 45
Notes payable	9	45
Accruals	45	21
Total current liabilities	**Rs 108**	**Rs 111**
Long-term debt	78	24
Common stock	192	114
Retained earnings	285	201
Total long-term capital	**Rs 555**	**Rs 339**
Total liabilities and equity	**Rs 663**	**Rs 450**

Additionally, Nelson's 1989 income statement is as follows (in millions):

Sales	Rs 1,365
Cost of goods sold	888
General expenses	300
EBIT	Rs 177
Interest	10
EBT	Rs 167
Taxes (40%)	67
Net income	Rs 100

Construct Nelson's 1989 statement of cash flows.

Adopted from Weston and Brigham 3.13

Cash flows from operations = Rs 88 million, Cash flow associated with long-term Investments = (Rs 225) million, Cash flow from financing = Rs 80 million.

132 327 192 114 ×78

Problem 5

You are the bank manager of Lumbini Commercial Bank and for 60 days loa[n] your new client submitted his financial statement containing the followin[g] facts:

Accounts payable	Rs 120,000	Cash	Rs 15,00[0]
Accruals	80,000	Accounts receivable	95,00[0]
Long term debt	200,000	Inventory	190,00[0]

As a bank manager, would you grant or deny the loan? Why?

1.50 a. 2.08; b. Deny due to the poor liquidity as measured by the current and quick ratio.

Problem 6

Consider the following information of Biratnagar Manufacturing Company:

Current liabilities	Rs 80,000	Current assets	Rs 200,000
Long term debt	120,000	Fixed assets, net	400,000
Sharehlder's equity	400,000	Total assets	600,000

a. Calculate the company's debt ratio.

b. Calculate the company's debt to equity ratio.

c. Calculate the company's equity multiplier.

a. 33.33%, b. 30%, c. 1.5 times

Problem 7

Consider the following information of a company:

Annual sales	Rs 360,000	Accouts Receivable	Rs 60,000
Inventory	Rs 72,000	Fixed assets	Rs 200,000
Cash	Rs 100,000	Days in year	360

a. Calculate inventory turnver ratio. What does it measure?

b. Calculate Days Sales Oustanding. What does it measure?

c. Calculate total assets turnver ratio. What does it measure?

a. 5 times, b. 60 days, c. 0.833 times

Problem 8

Consider the following incone statement and other data of a com[pany]

Sales ...

Less: Cost of goods sold ...

Gross profit ...

Less: Operating expenses ...

Earni[ngs] ...