

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR

PROGRAMME: PGDM Term -I
COURSE: FINANCIAL ACCOUNTING & ANALYSIS
CREDIT: 3

SESSION DURATION: 90 Minutes

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Course Introduction: Understanding a business requires a manager to hold knowledge in all functional domains. More so, an in depth understanding of the impact of a business transaction on the firm's value is critical to decision making. This course is designed to impart the student the basic understanding of accounting transactions and analyzing a firm's value.

Course Objectives:

- To expose the students to the basic accounting transactions
- To enable them to visualize the balance sheet after each business transaction
- To expose them to the recent accounting developments across the globe

Course Readings

Text book (TB): Financial Accounting For Managers, Sanjay Dhamija, *Pearson Education*

Reference book (RB): Financial Accounting – A Managerial Perspective, Prof. R. Narayanswamy, *PHI*.

Reading Material (RM): Students should refer to the RM as directed in the session plans.

Course Evaluation criteria:

Class Participation (The student is expected to come prepared in the class and involve in active discussion, preparing and discussing the assignments given)	10%
Quizzes (There will be TWO quizzes during the term. The quiz will consist of objective type, true/ false, fill-in the blanks type of questions.	20%
Mid-Term Examination	30%
End-Term Examination	40%
TOTAL	100%

Note: Students will be required to download Indian Accounting Standards from www.mca.gov.in and they must bring the soft copy during the classes.

Session Plan:

Session No.	Topic	Readings
1-2	Introduction to Accounting <ul style="list-style-type: none"> • Users of Financial Statements • Three Forms of Financial Statements • Accounting Principles • Indian Accounting Standards & IFRS • The Accounting Equation 	TB Chapter 1&2 RB Chapter 1 Annexure I (NTPC Ltd. And ITC Ltd.) – Exploring Financial Statements
3-5	The Accounting Cycle <ul style="list-style-type: none"> • Types of Accounts – Real, Nominal and personal • Rules of Debit and Credit • Journal • Ledgers and Trial Balance • Adjusting Entries 	TB Chapter 3 Case1: Decision Making Across the Organization Case 2: The Ethics Case
6-7	The Income Statement <ul style="list-style-type: none"> • Accrual Accounting and Cash Accounting • Various measures of profit • Appropriation of Profit • Abnormal Items • Earnings Per Share – Basic & Diluted 	TB Chapter 4 Exercise: Evaluating the income statements of NTPC Ltd and ITC Ltd.
8-10	The Balance Sheet <ul style="list-style-type: none"> • Components – Current/ Non-current Assets and Liabilities • Format – Vertical and Horizontal • Shareholder's Funds • Interpreting Liabilities and Assets • Contingent Liabilities 	TB Chapter 5
11-12	Accounting For Revenues <ul style="list-style-type: none"> • Components of Revenues • Revenue Recognition (Ind AS¹ 18) • Accounting for Receivables • Bad Debts, Provision for Bad Debts • 	TB Chapter 6

¹ Ind AS is Indian Accounting Standards

13	Accounting For Inventories <ul style="list-style-type: none"> • Types • Ind AS 2 • Valuing Inventories (LIFO and FIFO) • Net Realisable Value & LOCOM Valuation 	TB Chapter 7 RB Chapter 6 Case 3: Where is that spare bulldozer blade
14-16	Accounting for Fixed Assets and Intangibles <ul style="list-style-type: none"> • Operating Vs Capital Expenses • Types of Fixed and Intangible Assets • Cost of Acquisition • Depreciation and Amortisation • Asset Revaluation • Accounting For Depreciation • Impairment of Assets and its accounting • Ind As 16, 36 & 38 	TB Chapter 8 RB Chapter 7 Case 4: Exchange of Plant Assets
17-18	Consolidated Financial Statements <ul style="list-style-type: none"> • Meaning of CFS • Types of holding and accounting: <ul style="list-style-type: none"> ➤ Not Significant – Cost Method (<20%) ➤ Significant – Equity Method (20%-50%) ➤ Control – Consolidation (>50%) • Preparing Consolidated Balance Sheet • Treatment of Minority Interest 	TB Chapter 10 RB Chapter 8 Ref: Annexure II
19-20	Cash Flow Analysis <ul style="list-style-type: none"> • Need for Cash Flow Statement • Ind As 7 • Components of Cash Flow Statement • Preparing Cash Flow Statement 	TB Chapter 9 Case 5: Got Cash!!

ANNEXURE I

Balance Sheet and Income Statement of NTPC Ltd.

BALANCE SHEET AS AT

		₹ Crore	
Particulars	Note	31.03.2013	31.03.2012
EQUITY AND LIABILITIES			
Shareholders' funds			
Share capital	2	8,245.46	8,245.46
Reserves and surplus	3	72,142.05	65,045.71
		80,387.51	73,291.17
Deferred revenue	4	1,244.05	1,430.06
Non-current liabilities			
Long-term borrowings	5	53,253.66	45,908.27
Deferred tax liabilities (net)	6	915.30	636.90
Other long-term liabilities	7	1,965.99	1,729.06
Long-term provisions	8	739.92	603.70
		56,874.87	48,877.93
Current liabilities			
Trade payables	9	5,158.77	4,460.65
Other current liabilities	10	10,446.72	9,537.24
Short-term provisions	11	7,004.54	3,233.69
		22,610.03	17,231.58
TOTAL		161,116.46	140,830.74
ASSETS			
Non-current assets			
Fixed assets			
Tangible assets	12	62,687.42	45,044.47
Intangible assets	12	248.68	211.89
Capital work-in-progress	13	37,109.42	41,827.82
Intangible assets under development	13	-	0.04
Non-current investments	14	9,137.64	9,583.92
Long-term loans and advances	15	9,633.45	5,394.35
Other non-current assets	15A	1,132.77	1,371.88
		119,949.38	103,434.37
Current assets			
Current investments	16	1,622.46	1,622.46
Inventories	17	4,057.19	3,702.85
Trade receivables	18	5,365.49	5,832.51
Cash and bank balances	19	16,867.70	16,141.83
Short-term loans and advances	20	1,745.53	1,543.32
Other current assets	21	11,508.71	8,553.40
		41,167.08	37,396.37
TOTAL		161,116.46	140,830.74

STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED

		₹ Crore	
Particulars	Note	31.03.2013	31.03.2012
Revenue from operations (gross)	22	66,200.24	62,480.88
Less: Electricity duty		526.31	428.65
Revenue from operations (net)		65,673.93	62,052.23
Other income	23	3,101.58	2,789.65
Total revenue		68,775.51	64,841.88
Expenses			
Fuel		41,018.25	41,635.46
Employee benefits expense	24	3,360.12	3,101.71
Finance costs	25	1,924.36	1,711.64
Depreciation and amortization expense	12	3,396.76	2,791.70
Generation, administration & other expenses	26	4,211.22	3,588.79
Prior period items (net)	27	(29.72)	(313.58)
Total expenses		53,880.99	52,515.72
Profit before tax and exceptional items		14,894.52	12,326.16
Exceptional items	32	1,684.11	-
Profit before tax		16,578.63	12,326.16
Tax expense			
Current tax			
Current year		3839.69	2,913.64
Earlier years		(158.85)	154.84
Deferred tax			
Current year		278.40	327.85
Earlier years		-	(293.90)
Total tax expense		3,959.24	3,102.43
Profit for the year		12,619.39	9,223.73
Significant accounting policies	1		
Expenditure during construction period (net)	28		
Earnings per equity share (Par value ₹ 10/- each)	43		
Basic & Diluted (₹)		15.30	11.19



Balance Sheet as at 31st March, 2013

	Note	As at 31st March, 2013 (₹ In Crores)	As at 31st March, 2012 (₹ In Crores)
EQUITY AND LIABILITIES			
Shareholders' funds			
Share capital	1	790.18	781.84
Reserves and surplus	2	21497.67	22287.85
Non-current liabilities			
Long-term borrowings	3	66.40	77.32
Deferred tax liabilities (Net)	4	1203.72	872.72
Other Long term liabilities	5	3.11	12.94
Long-term provisions	6	125.62	1398.85
Current liabilities			
Short-term borrowings	7	—	1.77
Trade payables		1868.98	1449.22
Other current liabilities	8	3528.62	3371.27
Short-term provisions	9	5133.13	10330.73
TOTAL		34017.43	28966.20
ASSETS			
Non-current assets			
Fixed assets	10		
Tangible assets		11118.55	8983.66
Intangible assets		90.79	115.53
Capital work-in-progress - Tangible assets		1472.80	2269.26
Intangible assets under development		14.99	7.49
		12697.13	11375.94
Non-current investments	11	2000.86	1953.28
Long-term loans and advances	12	1727.97	16425.96
Current assets			
Current investments	13	5059.43	4363.31
Inventories	14	6600.20	5637.83
Trade receivables	15	1163.34	982.37
Cash and bank balances	16	3615.00	2818.93
Short-term loans and advances	17	512.14	519.43
Other current assets	18	841.36	17591.47
TOTAL		34017.43	28966.20

Statement of Profit and Loss for the year ended 31st March, 2013

	Note	For the year ended 31st March, 2013 (₹ In Crores)	For the year ended 31st March, 2012 (₹ In Crores)
Gross income	19	43044.21	36046.23
Gross Revenue from sale of products and services	20	41809.82	34871.86
Less: Excise Duty		12204.24	10073.43
Net Revenue from sale of products and services		29605.58	24798.43
Other operating revenue		295.69	349.03
Revenue from operations	21	29901.27	25147.46
Other income	22	938.70	825.34
Total Revenue		30839.97	25972.80
Expenses			
Cost of materials consumed	23	8936.21	7659.81
Purchases of Stock-in-Trade	24	3375.92	2037.21
Changes in inventories of finished goods, work-in-progress, Stock-in-Trade and Intermediates	25	(246.35)	(65.59)
Employee benefits expense	26	1387.01	1257.82
Finance costs	27	86.47	77.92
Depreciation and amortisation expense		795.56	698.51
Other expenses	28	5820.97	5409.79
Total Expenses		20155.79	17075.27
Profit before tax		10684.18	8897.53
Tax expense:			
Current tax	29	2934.79	2664.29
Deferred tax	30	331.00	70.87
Profit for the year		7418.39	6162.37
Earnings per share (Face Value ₹ 1.00 each)	31 (i)		
Basic		₹ 9.45	₹ 7.93
Diluted		₹ 9.33	₹ 7.84

ANNEXURE II



Consolidated Balance Sheet as at 31st March, 2013

	Note	As at 31st March, 2013 (₹ in Crores)		As at 31st March, 2012 (₹ in Crores)	
EQUITY AND LIABILITIES					
Shareholders' funds					
Share capital	1	790.18		781.84	
Reserves and surplus	2	22367.72	23157.90	18676.74	19458.58
Minority interests		179.89		157.09	
Non-current liabilities					
Long-term borrowings	3	90.80		105.38	
Deferred tax liabilities (Net)	4A	1213.59		882.03	
Other Long term liabilities	5	40.47		50.48	
Long-term provisions	6	144.75	1489.61	119.63	1157.52
Current liabilities					
Short-term borrowings	7	—		1.89	
Trade payables [Includes share of Joint Ventures ₹ 23.94 Crores (2012 - ₹ 10.79 Crores)]		1771.56		1538.37	
Other current liabilities	8	3560.03		3429.02	
Short-term provisions	9	5194.39	10525.98	4359.10	9328.38
TOTAL		35353.38		30101.57	
ASSETS					
Non-current assets					
Fixed assets	10				
Tangible assets		11728.45		9578.95	
Intangible assets		100.54		120.01	
Capital work-in-progress - Tangible assets		2041.37		2388.87	
Intangible assets under development		20.66		7.59	
		13891.02		12095.42	
Less: Provision for assets given on lease		5.67		5.67	
		13885.35		12089.75	
Goodwill on consolidation		316.51		314.13	
Non-current investments	11	814.17		765.02	
Deferred tax assets (Net)	4B	24.11		16.26	
Long-term loans and advances	12	1246.30		1096.13	
Other non-current assets	12A	1.24	16287.68	1.24	14282.53
Current assets					
Current investments	13	5167.11		4441.81	
Inventories	14	7522.09		6426.87	
Trade receivables	15	1395.76		1200.20	
Cash and bank balances	16	3828.30		3130.12	
Short-term loans and advances	17	529.61		484.17	
Other current assets	18	622.83	19065.70	135.87	15819.04
TOTAL		35353.38		30101.57	

Reading Material

Session Nos. 3-5

Case 1: Decision Making Across the Organization

Lisa Ortega operates Ortega Riding Academy. The academy's primary sources of revenue are riding fees and lesson fees, which are paid on a cash basis. Lisa also boards horses for owners, who are billed monthly for boarding fees. In a few cases, boarders pay in advance of expected use. For its revenue transactions, the academy maintains the following accounts: No. 1 Cash, No. 5 Boarding Accounts Receivable, No. 27 Unearned Boarding Revenue, No. 51 Riding Revenue, No. 52 Lesson Revenue, and No. 53 Boarding Revenue. The academy owns 10 horses, a stable, a riding corral, riding equipment, and office equipment. These assets are accounted for in accounts No. 11 Horses, No. 12 Building, No. 13 Riding Corral, No. 14 Riding Equipment, and No. 15 Office Equipment.

For its expenses, the academy maintains the following accounts: No. 6 Hay and Feed Supplies, No. 7 Prepaid Insurance, No. 21 Accounts Payable, No. 60 Salaries Expense, No. 61 Advertising Expense, No. 62 Utilities Expense, No. 63 Veterinary Expense, No. 64 Hay and Feed Expense, and No. 65 Insurance Expense.

Ortega makes periodic payments of cash dividends to shareholders. To record equity in the business and dividends, Ortega maintains three accounts: No. 50 Share Capital-Ordinary, No. 51 Retained Earnings, and No. 52 Dividends.

During the first month of operations, an inexperienced bookkeeper was employed. Lisa Ortega asks you to review the following eight entries of the 50 entries made during the month. In each case, the explanation for the entry is correct.

May 1	Cash	18,000	
	Share Capital—Ordinary		18,000
	(Invested \$18,000 cash in exchange for shares)		
5	Cash	250	
	Riding Revenue		250
	(Received \$250 cash for lessons provided)		
7	Cash	300	
	Boarding Revenue		300
	(Received \$300 for boarding of horses beginning June 1)		
14	Riding Equipment	80	
	Cash		800
	(Purchased desk and other office equipment for \$800 cash)		
15	Salaries Expense	400	
	Cash		400
	(Issued dividend checks to shareholders)		
20	Cash	148	
	Riding Revenue		184
	(Received \$184 cash for riding fees)		
30	Veterinary Expense	75	
	Accounts Payable		75
	(Received bill of \$75 from veterinarian for services rendered)		
31	Hay and Feed Expense	1,700	
	Cash		1,700
	(Purchased an estimated 2 months' supply of feed and hay for \$1,700 on account)		

Q1. Identify the wrong transactions and post the correct entries

Q2. The book-keeper reported a profit of \$4500. Is it correct? If not, then what is the actual profit?

Case 2:

Ethics Case

BYP3-6 Bluestem Company is a pesticide manufacturer. Its sales declined greatly this year due to the passage of legislation outlawing the sale of several of Bluestem's chemical pesticides. In the coming year, Bluestem will have environmentally safe and competitive chemicals to replace these discontinued products. Sales in the next year are expected to greatly exceed any prior year's. The decline in sales and profits appears to be a one-year aberration. But even so, the company president fears a large dip in the current year's profits. He believes that such a dip could cause a significant drop in the market price of Bluestem's ordinary shares and make the company a takeover target.

To avoid this possibility, the company president calls in Cathi Bell, controller, to discuss this period's year-end adjusting entries. He urges her to accrue every possible revenue and to defer as many expenses as possible. He says to Cathi, "We need the revenues this year, and next year can easily absorb expenses deferred from this year. We can't let our share price be hammered down!" Cathi didn't get around to recording the adjusting entries until January 17, but she dated the entries December 31 as if they were recorded then. Cathi also made every effort to comply with the president's request.

Q1. Who are the stakeholders?

Q2. What are the ethical considerations of the President's request?

Q3. Can Cathi accrue revenues and defer expenses and still be ethical?

Case 3: Where is that spare bulldozer blade?

Let's talk inventory—big, bulldozer-size inventory. Caterpillar Inc. (USA) (www.cat.com) is the world's largest manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines. It sells its products in over 200 countries, making it one of the most successful U.S. exporters, with approximately two-thirds of its sales being foreign.

During the 1980s, Caterpillar's profitability suffered, but today it is very successful. A big part of this turnaround can be attributed to effective management of its inventory. In 2007 one of Caterpillar's biggest trucks was selling for \$2.5 million. Now imagine what it costs Caterpillar to have too many bulldozers sitting around in inventory—a situation the company definitely wants to avoid. Conversely, Caterpillar must make sure it has enough inventory to meet demand.

During a recent 7-year period, Caterpillar's sales increased by 100%, while its inventory increased by only 50%. To achieve this dramatic reduction in the amount of resources tied up in inventory, while continuing to meet customers' needs, Caterpillar used a two-pronged approach. First, it completed a factory modernization program, which dramatically increased its production efficiency. The program reduced by 60% the amount of inventory the company processed at any one time. It also reduced by an incredible 75% the time it takes to manufacture a part.



Second, Caterpillar dramatically improved its parts distribution system. It ships more than 100,000 items daily from its 23 distribution centers strategically located around the world (10 million square feet of warehouse space—remember, we're talking bulldozers). The company can virtually guarantee that it can get any part to anywhere in the world within 24 hours.

In 2006 Caterpillar had record exports, profits, and revenues. It would seem that things couldn't be better. But industry analysts, as well as the company's managers, thought otherwise. In order to maintain Caterpillar's position as the industry leader, management began another major overhaul of inventory production and inventory management processes. The goal: Within four years the company wants to have cut the number of repairs in half, increased productivity by 20%, and increased inventory turnover by 40%.

In short, Caterpillar's ability to manage its inventory has been a key reason for its past success, and inventory management will very likely play a huge part in its ability to succeed in the future.

Case 4: Exchange of Plant Assets

Ordinarily, companies record a gain or loss on the exchange of plant assets. The rationale for recognizing a gain or loss is that most exchanges have **commercial substance**. An exchange has commercial substance if the future cash flows change as a result of the exchange.

Loss Treatment

To illustrate an exchange that results in a loss, assume that Roland Company exchanged a set of used trucks plus cash for a new semi-truck. The used trucks have a combined book value of \$42,000 (cost \$64,000 less \$22,000 accumulated depreciation). Roland's purchasing agent, experienced in the second-hand market, indicates that the used trucks have a fair value of \$26,000. In addition to the trucks, Roland must pay \$17,000 for the semi-truck. Roland computes the cost of the semi-truck as follows.

Fair value of used trucks	\$26,000
Cash paid	<u>17,000</u>
Cost of semi-truck	<u>\$43,000</u>

Roland incurs a loss on disposal of \$16,000 on this exchange. The reason is that the book value of the used trucks is greater than the fair value of these trucks. The computation is as follows.

Book value of used trucks (\$64,000 – \$22,000)	\$42,000
Fair value of used trucks	<u>26,000</u>
Loss on disposal	<u>\$16,000</u>

In recording an exchange at a loss, three steps are required: (1) Eliminate the book value of the asset given up, (2) record the cost of the asset acquired, and (3) recognize the loss on disposal. Roland Company thus records the exchange on the loss as follows.

Semi-truck	43,000	
Accumulated Depreciation—Used Trucks	22,000	
Loss on Disposal	16,000	
Used Trucks		64,000
Cash		<u>17,000</u>
(To record exchange of used trucks for semi-truck)		

Gain Treatment

To illustrate a gain situation, assume that Mark Express Delivery decides to exchange its old delivery equipment plus cash of \$3,000 for new delivery equipment. The book

value of the old delivery equipment is \$12,000 (cost \$40,000 less accumulated depreciation \$28,000). The fair value of the old delivery equipment is \$19,000.

The cost of the new asset is the fair value of the old asset exchanged plus any cash paid (or other consideration given up). The cost of the new delivery equipment is \$22,000 computed as follows.

Fair value of old delivery equipment	\$19,000
Cash paid	3,000
Cost of new delivery equipment	<u>\$22,000</u>

A gain results when the fair value of the old delivery equipment is greater than its book value. For Mark Express, there is a gain of \$7,000 on disposal, computed as follows.

Fair value of old delivery equipment	\$19,000
Book value of old delivery equipment (\$40,000 – \$28,000)	12,000
Gain on disposal	<u>\$ 7,000</u>

Mark Express Delivery records the exchange as follows.

Delivery Equipment (new)	22,000	
Accumulated Depreciation—Delivery Equipment (old)	28,000	
Delivery Equipment (old)		40,000
Gain on Disposal		7,000
Cash		3,000
(To record exchange of old delivery equipment for new delivery equipment)		

In recording an exchange at a gain, the following three steps are involved: (1) Eliminate the book value of the asset given up, (2) record the cost of the asset acquired, and (3) recognize the gain on disposal. Accounting for exchanges of plant assets becomes more complex if the transaction does not have commercial substance.

Case 5: Got Cash!!

In today's environment, companies must be ready to respond to changes quickly in order to survive and thrive. They need to produce new products and expand into new markets continually. To do this takes cash—lots and lots of cash. Keeping lots of cash available is a real challenge for a young company. It requires careful cash management and attention to cash flow.

One company that managed cash successfully in its early years was Microsoft (www.microsoft.com) (USA). During those years, the company paid much of its payroll with share options (rights to purchase company shares in the future at a given price) instead of cash. This strategy conserved cash and turned more than a thousand of its employees into millionaires during the company's first 20 years of business.

In recent years, Microsoft has had a different kind of cash problem. Now that it has reached a more "mature" stage in life, it generates so much cash—roughly \$1 billion per month—that it cannot always figure out what to do with it. By 2004, Microsoft had accumulated \$60 billion.

The company said it was accumulating cash to invest in new opportunities, buy other companies, and pay off pending lawsuits. But for years, the U.S. government has blocked attempts by Microsoft to buy anything other than small firms because it fears that purchase of a large firm would only increase Microsoft's monopolistic position. In addition, even the largest estimates of Microsoft's legal obligations related to pending lawsuits would use up only about \$6 billion in cash.



Microsoft's shareholders have complained for years that holding all this cash was putting a drag on the company's profitability. Why? Because Microsoft had the cash invested in very low-yielding government securities. Shareholders felt that the company either should find new investment projects that would bring higher returns, or return some of the cash to shareholders.

Finally, in July 2004 Microsoft announced a plan to return cash to shareholders, by paying a special one-time \$32 billion dividend in December 2004. This special dividend was so large that, according to the U.S. Commerce Department, it caused total personal income in the United States to rise by 3.7% in one month—the largest monthly increase ever recorded by the agency. (It also made the holiday season brighter, especially for retailers in the Seattle area.) Microsoft also doubled its regular annual dividend to \$3.50 per share. Further, it announced that it would spend another \$30 billion over the next four years buying treasury shares. In addition, in 2008 Microsoft offered to buy Yahoo! (USA) for \$44.6 billion (Yahoo! declined the offer).

These actions will help to deplete some of its massive cash horde, but as you will see in this chapter, for a cash-generating machine like Microsoft, the company will be anything but cash-starved.

Source: "Business: An End to Growth? Microsoft's Cash Bonanza," *The Economist* (July 23, 2005), p. 61.