## 15.514

# **Mid-term Examination Solutions**

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#### About the exam:

- 1. The exam consists of
  - a. The exam questions
  - b. 5-page supplement with financial statements.
- 2. There are 87 points in total -- point allocations are stated for each question.
- 3. Difficult questions are not necessarily worth more. Therefore, be sure not to spend too much time on any one question. If you have trouble on a question come back to it later.
- 4. Please write your answers in the space provided, and show any supporting computations you make.
- 5. Please write as legibly as possible -- we can't grade what we can't read!
- 6. If a question is unclear, make an appropriate assumption that does not contradict any information given in the question.
- 7. This exam must be completed in 1 hour and 30 minutes.

## **QUESTION 1: TRANSACTIONS AND STATEMENT OF CASH FLOWS** (40 points, 8 points each)

For each event in (1) - (5):

- (a) Record the transaction (if necessary) using either the balance sheet equation or journal entries. Be specific about account names. Be sure to label each account as Asset (A), Liability (L), or Equity (E). Equity (E) includes income statement items (i.e. revenue and expense accounts).
- (b) Indicate the effect of each transaction on the Statement of Cash Flows (SCF). Specify which section(s) of the SCF the transaction affects (Operating, Investing, or Financing). Use the indirect method for the Operating section (i.e., start with Net Income and reconcile to Cash from Operations). If there is no effect on the SCF, write "no effect".
- (c) Ignore taxes

The first event is given as an example.

Event/Transaction	Statement of Cash Flows	
Example: Recognize \$8,000 of SG&A expense, of which \$2,500 is paid.	Operating Section	

Event/Transaction	Statement of Cash Flows
(1) Insurance Premium of \$400 for two years is paid in advance.	
(1) montained 1 terminal of \$100 for the joins is place in advance.	
(2) Insurance expense for the first year [See (1)] is recognized.	
(2) insurance expense for the first year [See (1)] is recognized.	

Event/Transaction	Statement of Cash Flows
(3) Long-term debt of \$50,000 is paid off.	
(4) The company buys equipment worth \$4 million by paying \$1 million cash and signing a 10-year note payable for \$3 million.	
(5) The company sells \$50,000 of goods that cost \$32,000. Cash sales account for \$20,000 of the total sales.	

For Q2-Q4, you need to refer to the financial statements and relevant notes for Dow Jones & Company.

# Question 2: (12 points)

a.	In Schedule II of the financial statements, Dow Jones provided detailed information on information related to Allowance for Doubtful Accounts. Based on the schedule, what is the Bad debt expense for Dow Jones in 2001 (1 point)?
b.	Show the Balance Sheet Equation effects (or a journal entry) to record Dow Jone's bad debt expense (2 points).
c.	Show the Balance sheet equation effects (or a journal entry) to record Dow Jones recovery of accounts that were previously written off and the cash receipt (2 points).
d.	Estimate the <i>total</i> amount of cash Dow Jones received from customers from sales and the collection of accounts receivable during the fiscal 2001 (7 points). [Hint: check Dow Jones's current liabilities]

#### Question 3 (22 points):

The following footnote appears in Dow Jones 2001 10-K:

Newsprint Inventories is stated at the lower of cost or market. The cost of newsprint is computed by the lastin, first-out (LIFO) method. If newsprint inventory had been valued by the average cost method, it would have been approximately \$7.5 million and \$9.7 million higher in 2001 and 2000, respectively.

Assume the average cost method and FIFO yield insignificant differences in the ending inventory value.

- a. If Dow Jones were to use the average cost method, what would be their ending inventory newsprint inventory balance on 31 December 2001(2 points)?
- b. If Dow Jones had always used the average cost method would they report higher or lower income in fiscal 2001? By how much (3 points)?
- c. A competitor in the publishing industry uses average cost to value their inventory. The competitor's inventory turnover ratio (i.e., CoGS/Average Inventory) was 12 times in 2001. Was Dow Jones more or less efficient in managing their inventory compared to the competitor (6 points)?

d. Assume Dow Jones had \$1 million of newsprint spoiled by a flood. How would you use the Balance Sheet Equation to recognize this reduction in inventory value (2 points)? (Ignore taxes)

e.	Assume that "Accounts payable – trade" arise only to purchases of newsprint. How much cash did Dow Jones pay to its newsprint suppliers in fiscal 2001 (5 points)?
f.	Assume that Dow Jones had expensed amounts related to "Prepaid expenses" as soon as cash was paid in the current and all prior years.  a. How much higher/lower would fiscal <i>2001 net income</i> be under this new accounting method (Ignore taxes)(2 points)?
	b. How much higher/lower would <i>retained earnings</i> be on December 31, 2001 under this new accounting method (Ignore taxes)(2 points)?

## Question 4 (13 points):

How much was Dow Jones' depreciation expense? Where did you find the info a. (1 point)? b. What was the value of PPE acquired for cash in fiscal 2001 (1 point)? Use the Balance Sheet Equation (or a journal entry) to record the gain on disposal c. of PPE (7 points). d. If in the beginning of 2001 Dow Jones decided to lengthen the estimated useful life for some of its PPE. What effect would this have on the fiscal 2001 income? On the 31 December 2001 balance sheet (2 points)?

e. Note the "Contract guarantees, net" charge on the 2001 income statement. What was the effect of this charge on operating cash flow (2 points)?