15.515 Midterm Review

Review of Key Concepts
- Revenue Recognition
- Accounts Receivable
- Inventory (LIFO vs. FIFO)
- PP&E
- Statement of Cash Flows

Problems
- E4-5
- P6-4
- P7-9
- P9-8
- P14-14

Checklist

Famous Last Words for Midterm

Questions
**REVENUE RECOGNITION**

Revenue is recognized when the firm has:

- Performed all, or a substantial portion of, the services to be provided
- Incurred a substantial majority of the costs, and the remaining costs can be estimated
- Received either cash, a receivable, or some other asset for which
  - A reasonable precise value can be measured
  - Collectibility can be assured
E4-5

See Problem E4-5 in the course textbook.
ACCOUNTS RECEIVABLE

- Two methods for determining Allowance for Bad Debts
  - Percentage of (Credit) Sales
    - Fixes the Bad Debt Expense recorded for the year
  - Aging Method
    - Fixes the *Ending Balance* of Allowance for Bad Debts
    - Bad Debt Expense is as a “Plug-in”

- Relevant Formulae vs. “tables” (Don’t use them blindly!!)
  - \( A/R_{EB} = A/R_{BB} + \text{Credit Sales} - \text{Cash Received} - \text{Write-off} + \text{Recovery} \)
  - \( ADA_{EB} = ADA_{BB} + \text{Bad Debt Expense} - \text{Write-off} + \text{Recovery} \)

- *Write-offs* and *Recovery of bad debt* only affects the Balance Sheet (not the Income Statement). They affect the Gross A/R and ADA but not the Net A/R.

- Watch the sign convention for ADA!
P6-4

See Problem P6-4 in the course textbook.
INVENTORY (LIFO vs. FIFO)

- LIFO and FIFO produce temporary differences in accounting numbers
- No approach is superior
- Firms using LIFO will give information to make numbers comparable across firms\(^1\)
- Relevant formulae
  - \(\text{LIFO Reserve} = \text{cumulative difference in FIFO} - \text{LIFO inventory}\) \(\text{**or**}\)
  - \(\text{LIFO Reserve} = \text{Ending Inv}_{\text{FIFO}} - \text{Ending Inv}_{\text{LIFO}}\)
  - \(\text{Change in LIFO Reserve} = \text{COGS}_{\text{LIFO}} - \text{COGS}_{\text{FIFO}}\)
  - \(\text{INV}_{\text{EB}} = \text{INV}_{\text{BB}} + P^2 - \text{COGS}\)
- Make sure you know when to use the absolute amount in the LIFO Reserve and when to use changes in the LIFO Reserve

\(^1\) LIFO Reserve
\(^2\) Purchases/Production
P7-9

See Problem P7-9 in the course textbook.
**PP&E**

- Key formulae vs. “table”
  - $PPE_{EB} = PPE_{BB} + \text{Acquisitions} - \text{Disposals}$
  - $\text{AccDep}_{EB} = \text{AccDep}_{BB} + \text{Depreciation} - \text{AccDep}_{\text{Disposal}}$
  - $\text{MV} / \text{Proceeds from sales} = \text{BV} + \text{gain/loss}$

- Three key ways to depreciate a fixed asset:
  1) Straight-line Depreciation Method
  2) Production (Depletion) Method
  3) Accelerated Depreciation

- Four simple steps to depreciation:
  1) Assess total cost to be allocated over time
  2) Estimate the salvage value (all methods except for double-declining balance)
  3) Estimate useful life
  4) Choose depreciation method

- Watch the sign convention for Accumulated Depreciation!
**P9-8**

See Problem P9-8 in the course textbook.
**STATEMENT OF CASH FLOWS**

Two major approaches to Statement of Cash Flows: Direct and Indirect

¶ The major difference between these two methods is in how Cash Flows from Operating Activities are presented; most companies use the Indirect approach.

- **Direct Approach:**
  - Analyze *operating* cash transactions and classify them as either cash sales or cash expenses (i.e., look down the “Cash” column of the BSE)

- **Indirect Approach:**
  - Start with *net income* derived from accrual-based accounting
  - Decrease *net income* for *operating* income(s) that did not generate cash (i.e. A/R)
  - Increase the net income for *operating* expenses that did not use up cash (e.g., *depreciation and amortization*)
  - Adjust the net income for *operating* cash items that were not expensed

¶ The *investing* and *financing* sections are the same for both Direct SCF and Indirect SCF
P14-14 (PARTS A+B ONLY)

See Problem P14-14, parts A and B, in the course textbook.
**P14-14 (CONTD.)**

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3 Prepaid Rent
Midterm Review

Income Statement

Statement of Cash Flows

Statement of Retained Earnings
FAMOUS LAST WORDS BEFORE THE MIDTERM

¶ Put some effort into your cheat sheet… you learn a lot through the preparation
   • Examples are useful
¶ Review
   • Homework/problem sets
   • Midterms from previous years
   • Lecture notes
   • Recitation notes
   • Chapter summaries
   • Optional problems (time permitting)
¶ Get some sleep the night before the midterm
¶ And, most important of all (… the one piece of advice I always hated… )

RELAX!!!! 😊