COMM 293 Final Exam Review

CMP

COMMERCE MENTORSHIP PROGRAM

FINAL REVIEW SESSION

COMM 293

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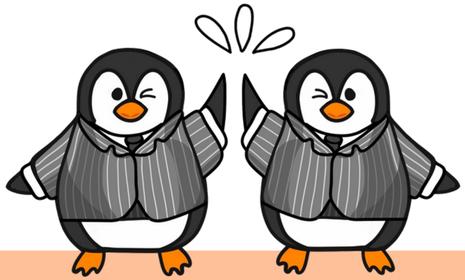

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Plant Assets, Natural Resources, & Intangible Assets

Non-Current Assets

- Not for sale
- Typically large capital expenditures
- Tangible (land, buildings, equipment)
- Intangible (patent, trademarks)
- Uncertain useful lives

Measuring Plant Assets

- Recorded at historical cost on acquisition date
- All expenses in acquiring asset and making it ready for intended use are capitalized
- Ex. buying price, legal commissions, taxes on land
- Ex. Testing soil, decontaminating, land improvements

Buildings and Equipment

- 1) What types of costs should be capitalized for buildings and equipment?

Expensing vs Capitalization

Expense

- Regular and recurring
- Not affecting useful life
- Minor amounts
- Dr Maintenance Expense and Repairs
- Ex. maintenance, spare parts

Capitalize

- Measurable economic benefits
- Extend useful life
- Infrequent
- More production capacity
- Dr Plant asset
- Ex. machine replacements, significant performance enhancers

Materiality Concept – Power to influence investor's decision

Depreciation

- Not measuring falling economic value
- Allocating procurement costs to benefits received over time
- Expenses ‘matching principle’
- Net book value = Acquisition cost – Accum. depreciation
- Methods: Straight line, units of activity, declining balance

Straight line Depreciation

- Asset depreciates uniformly over time
- Ex. Buildings, computers
- Depreciation expense = depreciable cost / useful life
- Depreciable cost = acquisition cost – salvage value

Straight Line Depreciation Example

- 2) Apple buys equipment for $500,000 at start of 2016. The estimated useful life is 5 years and salvage value $100,000. Show the depreciable cost, annual depreciation expense, accumulated depreciation and book value until 2019.

Units of Activity Depreciation

- Based on usage of asset
- Ex. cars, planes, some machines
- Depreciation expense = depreciable cost per unit x units of activity in year
- Depreciable cost per unit = depreciable cost / total units of activity

Units of Activity Example

- 3) Apple buys a truck for $400,000 in 2014 with residual value $50,000 and useful life of 100,000 km. If car runs 15,000 km in 2014 and 9,000 km in 2015. Show the annual depreciation cost, accumulated depreciation and book value.

Declining Balance Depreciation

- Assumes asset provides more benefits in early years
- Greater depreciation expense in early years
- Depreciation expense = beginning BV x 1/useful life
- Depreciation expense = beginning BV x 2/useful life

Declining Balance Depreciation Example

- 4) Apple bought a factory for $800K in 2014 with residual value of $60K and useful life of 16 years. They use double-declining depreciation. Show depreciation expense, accumulated depreciation and BV until 2016.

Changing Depreciation Estimates

- Due to new revised useful lives, residual values
- Applied prospectively to current & future years
- 1) Determine asset net BV at time of change
- 2) New depreciable cost = net BV at time of change - updated residual value
- 3) Updated depreciation expense = new depreciable cost / remaining useful life at time of change

Changing Depreciation Estimate Example

- 5) Apple buys a factory for $600K with residual value $80K and useful life 15 years. They use straight-line depreciation. At the end of the 4th year (before depreciating), they update the useful life to 20 years and residual value to $60K. What is the new depreciation expense?

Disposal of Assets

- Intentional (ex. sale, retirement)
- Unintentional (ex. loss due to accident)
- Remove asset balance and related accumulated depreciation from balance sheet
  - Dr Cash
  - Dr Accumulated Depreciation
  - Cr Asset (truck, equipment, machine, etc…)
- Then, Dr a loss or Cr a gain from disposal

Disposal of Assets Example

- 6) Apple bought a computer for $120K with a salvage value of $20K and useful life of 15 years. They use straight-line depreciation. They used the asset for 4 full years before selling it. Record the journal entries if they sold it for: $93.3K, $90K and $95K.

Natural Resources

- Total costs include all exploration, evaluation and development expenses of the resource
- Use depletion instead of depreciation
- Use units of activity method to allocate costs over time
- Unit depletion rate = total cost – salvage value / units estimated in resource
- Depletion cost = unit depletion rate x # units extracted

Intangible Assets

- No physical substance
- Can have finite or indefinite useful lives
- Must be separable from the company and individually sold
- Same recording measurement treatment as plant assets
  - Acquisition cost includes everything to make it ready for use
  - Ex. buying price, taxes, legal fees

Definite Useful Life – Patents

- Grants holder exclusive right to produce & sell something
- Legal life of 20 years
- Subject to straight line amortization
- No accumulated amortization for intangible assets
- Ex. 7) Apple bought a patent for $200K and plans to use it for 10 years. Journalize the depreciation.

Intangible Assets – Indefinite Lives

- Not amortized
- Trademarks (legal right to use name/image/slogan for company)
- Costs incurred to buy franchises
  - Ex. the Triple O's in Sauder
  - Amortized only if franchise has finite useful life
- Costs incurred to buy licenses
  - Ex. mining company buys licenses to explore certain area

Intangible Assets – Indefinite Lives Cont.

- R&D (generally not intangible assets)
  - Varying treatments under IFRS and US GAAP
- Goodwill = purchase cost – fair value of assets
  - Ex. brand name, customer & supply chain relations, strong labour force

Financial Statement ratio – Asset Turnover

- Asset turnover = net sales / average total assets
- Measure of capacity to make sales based on fixed investment in assets
- High value = very good assets
- Ex. 8) Apple's net sales in 2017 were 4.4M and ending balance of assets in 2016 were 5.8M and ending in 2017 were 5.2M. Find asset turnover.

Liabilities

Liabilities Basics

- Debt is key part of building assets
- Obligations, from past transactions, resulting in outflow of economic resources
- Liability types:
  - Certain (specific amounts owed)
  - Provisions (timing/amount is uncertain)
  - Contingent (depends if on occurrence of future event)

Current Liability Types

- Due in less than 1 year
- Accounts/trades payable
- Notes payable
  - Interest = face value x annual interest rate x time (in terms of years)
  - Ex. 9) Nike gives a $400K note payable to Apple at 12% annual interest. Repayment is due in 4 months. Write the journal entries at granting of note, interest payment after 1 month, and at payback for Apple.

Liabilities - Unearned Revenues

- Cash is received before a product/service is delivered
- Ex. 10) Apple rents out to Tesla some of its warehouse storage space for $20K year at the start of the year. Journalize transaction for Apple at the start of the year, and every month.

Provisions Liabilities

- Certain liability, but uncertain timing or value
- Ex. product warranties
- Ex. 11) Tesla sold 3000 cars and estimates a $700 warranty cost on each. Later, the total warranty cost turned out to be $15K. Journalize the warranty entries.

Break Time!

We hope you have been enjoying the review session so far! When you have a chance, please fill out our survey. We appreciate your feedback. You can be entered to win a $20 giftcard of your choice!

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Bonds

- Long-term liabilities
- Buyer of the bond is lending money to the seller
- Buyer is owed periodic interest payments and principal value when the bond matures
- Price of bond = present value of future cash flows
- Sample 100K bond at 10% interest, maturing in 4 years payment schedule:

Bonds – Market r = Stated r

- PV of future cash flows = bond's face value
- PV of 1 time payment = P(1+r)^-t
- PV of an annuity = A[(1-(1+r)^-t)/r]
- Could apply 1 time payment multiple times, but that is more work

Bonds – Market r = Stated r

- Ex. 12) Apple issues a $100K face value bond at 8% interest, maturing in 5 years. The market interest rate is 8%. Journalize the bond sale, interest payments and maturity date.

Bonds – Market r > Stated r

- Bonds sell at a discount (less than their face value)
- Interest expense = market r x bond carrying value
- Bond carrying value = bond face value – balance in discounts on bonds payable

Bonds – Market r > Stated r

- Ex. 13) Apple issues a $100K face value bond at 8% interest maturing in 5 years. The market interest rate is 12%. Journalize the bond sale, first and second interest payment.

Bonds – Market r < Stated r

- Bonds sell at a premium (more than their face value)
- Interest expense = market r x bond carrying value
- Bond carrying value = bond face value + balance in premium on the bonds payable

Bonds – Market r < Stated r

- Ex. 14) Apple issues a $100K face value bond at 8% interest maturing in 5 years. The market interest rate is 6%. Journalize the bond sale, first and second interest payment.

Financial Statement Ratios – Working Capital

- Working capital = current assets – current liabilities
- Measure of how effective current assets are at satisfying current liabilities
- Too small -> lots of obligations to creditors (possible threat to be unmet)
- Too large -> poor use of inventory (excess inventory)

Financial Statement Ratios

- Current ratio = current assets / current liabilities
  - Ability to satisfy short-term liabilities
  - Suggest good liquidity if large ratio
- Debt to asset = total liabilities / total assets
  - Indicator if company can satisfy maturity debt obligations
- Times interest earned = (net earnings + interest expense +income tax expense) / interest expense
  - Capacity to cover interest payment liabilities

Shareholder’s Equity

Shareholder’s Equity Sources

- Retained earnings
  - Reinvested net income, less dividends
- Contributed surplus
  - Gains from selling shares over par value and other transactions
- Paid-in capital
  - Proceeds from share issuance, investor contributions

Share Issuance Details

- Authorized shares
  - Set number of shares allowed to be sold
  - Does not lead to journal entries
- Total issued shares
  - Outstanding shares -> held by shareholders
  - Treasury shares -> required by company
- Market cap = # shares issued x share price at given date

Common Shares

- If issued for cash -> Dr Cash , Cr Common Shares
- If issued for asset -> Dr Asset, Cr Common Shares
  - Recorded at market value of asset (if unknown, then market value of share)
- If issued for service -> Dr Service Expense, Cr Common Shares
  - Recorded at market value of service (if unknown, then market value of share)
- Ex. 15) Apple issued 12K shares at $5 each to get computers valued at $50K. Later, they received customized labour services in exchange for 8K shares at $6 each. Journalize both cases.

Steps for Journalizing Reacquisition of Shares

- Write off cost of shares from share capital account
  - Calculate avg. issuance price -> balance of common share account / # of outstanding common shares before acquisition
  - Dr Common Shares, Cr Asset
- Record cash payment
- Record difference to contributed surplus as gain/loss

Share Reacquisition - Issuance p = Purchase p

- Dr Common Shares, Cr Cash
- Ex. 16) Apple had $500K in their common shares account and 50K common shares issued. They reacquired and cancelled 15K shares at $10 each. Journalize.

Share Reacquisition - Issuance p > Purchase p

- Dr Common Shares, Cr Cash, Cr Contributed Surplus
- Ex. 17) Apple had $500K in their common shares account and 50K common shares issued. They reacquired and cancelled 15K shares at $8 each. Journalize.

Share Reacquisition - Issuance p < Purchase p

- Dr Common Shares, Dr Contributed Surplus, Cr Cash
- Debit leftover to retained earnings if not enough balance in contributed surplus
- Ex. 18) Apple had $500K in their common shares account and 50K common shares issued. They reacquired and cancelled 15K shares at $12 each. Journalize.

Dividends

- Portion of company's RE paid out to stockholders
- Not legally required
- 2 types:
  - Cash dividends (paying out cash)
  - Stock dividends (paying out company stock)

3 Key Dividend Events

- Declaration date
  - Approved by board of directors
  - Dividends payable (liability) journalized
- Record Date
  - Eligible shareholders for dividend are identified
  - No accounting entry
- Payment Date
  - Actual paying out of dividend journalized

Cash Dividends Journal Entries

- Declaration date
  - Dr Dividends Declared (-SE), Cr Dividends Payable
- Record date
  - No journal entry
- Payment date
  - Dr Dividends Payable, Cr Cash

Cash Dividends Example

- Ex. 19) Tesla declared a $3.22 per share dividend on Mar 1 to be paid on Mar 24 for eligible shareholders recognized on Mar 12. Tesla has 1.6 M shares outstanding. Journalize.

Stock Dividends

- Increase number of shares outstanding
- Shareholders retain same % ownership of company
- Show management confidence in company future performance
- Small stock dividend
  - Distribution of shares less than 20-25%
  - Recorded at share market value
  - Focus of class

Stock Dividends Journal Entries

- Declaration date
  - Dr Stock Dividends Declared (-SE), Cr Common Stock Dividends Distributable (+SE)
- Record date
  - No journal entries
- Payment date
  - Dr Common Stock Dividends Distributable, Cr Common Shares
- Share price on declaration date is used

Stock Dividends Example

- Ex. 20) Tesla declares a 12% stock dividend on Mar 3 to eligible shareholders on Mar 18, to be paid on Mar 29. The share price on Mar 3 is $21, on Mar 18 $25, on Mar 29 $17. Apple has 2.4M common shares outstanding and $14M balance in common shares. Journalize.

Stock Splits

- Outstanding shares increased by a set ratio
- Stock price will decrease by same ratio
- Total common shares outstanding will stay the same
- Shares get more affordable
- People get more, but smaller pieces of same pie
- No journal entries

Financial Statement Ratios

- Earnings per share = NI – preferred dividends / avg # of outstanding shares
  - Measuring capacity to generate NI per each common share
- Dividends payout = cash dividends declared / NI
  - High ratios preferred by dividend seeking investors
- Dividend yield = dividends declared per share / market price per share
  - Investor’s return on share investments

Statement of Cash Flows

Cash Flow Basics

- Needed to invest, cover liabilities, take advantage of market opportunities
- Statement of cash flows split into 3 activities:
  - Operating (provision of business goods/services)
  - Investing (acquiring/selling assets for long term)
  - Financing (borrowing/lending money, dividends)
- Determining total cash flows in operating activities:
  - Indirect method -> start with NI then get rid of non-cash items (focus of class)

Classification of Cash Flows

Activity	Cash Inflows	Cash Outflows
Operating	Cash received from revenues	Cash paid for expenses
Investing	Sale of plant assets Sale of investments Collection of loans	Purchase of plant assets Purchase of investments Loans to others
Financing	Issuing shares Issuing Bonds and notes	Dividend Payments Share Repurchases Repayment of debt

Cash Flows From Operating Activities

Start with NI

Add Back

- Depreciation Expense
- Increase in deferred taxes
- Decrease in accounts receivable
- Decrease in inventories
- Decrease in prepaid expense
- Increase in payables
- Loss on disposal

Subtract

- Decrease in deferred tax
- Increase in accounts receivable
- Increase in inventories
- Increase in prepaid expense
- Decrease in payables
- Gain on disposal

Cash Flows from Investing and Financing

- Recorded on transactional basis, unlike operating activities
- Easier than calculating operating cash flows
- For investing:
  - Sum proceeds from disposals/sales
  - Subtract acquisitions and purchases
- For financing:
  - Sum values from debt proceeds/issuance of stock
  - Subtract debt, interest and dividend payments