**Advanced Profitability Analysis**

**Learning Problems**

**Discontinued Operations at Acme**

Acme Ltd. decided to sell its CD Division and prepared a disposal plan on May 1, 2017. This component can be operationally and financially distinguished from the rest of Acme. The division was not sold until April 15, 2018. The following additional data are also available:

1. The loss from operations for the CD Division in 2017 was CAD 2,900,000 (before tax).
2. The assets of this disposal group were written down by CAD 3,000,000 (before tax) in 2017.
3. The loss from operations until April 15, 2018, was CAD 600,000 (before tax).
4. The gain on disposal of the business segment was CAD 200,000 (before tax).

This transaction met the conditions to be classified as held for sale. The tax rate is 25.0%.

**REQUIRED:**

1. What amounts relating to the discontinued operation should appear on the income statements for 2017 and 2018?

1. What balance sheet and cash flow statement disclosures are required in 2017 and 2018?

3. What disclosures are required if the held-for-sale conditions are not met?

**Determining Discontinued Operations**

**Case 1 - Pepsi**

Pepsi-Cola Ltd. has three divisions: beverages, snack foods, and fast food. The divisional level is the lowest level at which operational and financial information can be clearly distinguished.

On June 3, 2013, Pepsi sold off the fast-food division.

On July 2, 2013, Pepsi sold off Frito-Lay in the snack food division.

**Case 2 - McDonald's**

McDonald’s has both franchise and company-owned restaurants. The store level is the lowest level at which operational and financial information can be clearly distinguished.

On May 8, 2013, due to poor financial performance, the company decided to close its company-owned stores in the interior of British Columbia.

On May 28, 2013, to generate needed cash flows, the company decided to sell its company-owned stores in Red Deer to a new franchisor.

**Case 3 - Beaver Lumber**

To compete with other “big box” home improvement retailers, Beaver Lumber feels it must rationalize and improve its current outlets. The store level is the lowest level at which operational and financial information can be clearly distinguished.

On September 1, 2013, Beaver Lumber closed its outlet in Kamloops due to low profitability.

On September 12, 2013, Beaver Lumber closed two stores in Lethbridge but built a new warehouse outlet to compete with Home Depot.

**Case 4 - Spalding Sports**

Spalding Sports has four divisions: baseball, football, tennis, and bicycles. The bicycle division is experiencing financial difficulties due to foreign competition. The divisional level is the lowest level at which operational and financial information can be clearly distinguished.

On November 1, 2013, Spalding sold its bicycles division to a foreign manufacturer.

On November 15, 2013, Spalding closed its bicycle factory in Utah and outsourced production to Thailand.

**REQUIRED:**

1. Determine whether the transactions in each of the above cases should be classified as discontinued operations.

**Revenue Recognition**

**Case 1 – Point in Time or Over Time**

Sparkle Ltd. signed a two-year, CAD 250,000 contract to provide cleaning services to Willow Industries.

**Case 2 – Point in Time or Over Time**

Emerson Electric negotiated a 2-year, CAD 8,500,000 contract to install the electrical, heating, and air conditioning systems in a new residential building being constructed by Nicola Developments.

**Case 3 – Point in Time or Over Time**

Centurion Software agreed to a CAD 1,500,000 contract with Atlantic Industries to develop a proprietary order entry system, which includes 1,000 hours of operator training. The project can be cancelled at different milestones in the contract, but Centurion has the right to be compensated for the work completed. Centurion charges CAD 200 per hour for training and spent CAD 25,000 preparing its initial bid for the project.

**Case 4 – Point in Time or Over Time**

Badger Inc. manufactures heavy-duty equipment for the forestry, construction, and mining industries. Demand for Badger’s equipment is strong, so a customer must first place an equipment order, pay a non-refundable deposit, and then wait for delivery in six to twelve months. If a customer decides to cancel their order, the equipment is used to satisfy the next order in the queue. Able Construction ordered CAD 2,500,000 of equipment and paid a 10.0% deposit.

**Case 5 – Bill-and-Hold Arrangements**

Cecil Enterprises sold CAD 5,400,00 in goods net 30 to Dexter Ltd. using a bill-and-hold arrangement. The goods were transferred to a separate area of Cecil’s warehouse for Dexter’s exclusive use. Dexter directed Cecil to forward these goods to its customers as required, and Dexter paid for the transportation. This arrangement allowed Dexter to reduce its distribution and warehousing costs.

**Case 6 – Consignment Arrangement**

Hansen Inc. manufactures musical instruments and recently sold trumpets worth CAD 25,000 to a dealer in Winnipeg. Dealers do not pay for instruments until they are sold to the final customer, and can return them to Hansen at any time. Hansen may also direct dealers to ship instruments to other dealers to address inventory shortages.

**Case 7 – Non-Refundable Up-front Fees**

Total Fit charges new members a non-refundable initial fee of CAD 500, which gives them full use of the gym’s facilities and services, excluding personal trainers, dietitians, and massage therapists, for two years.

**Case 8 – Determine the Transaction Price**

Seaway Ltd. manufactures replacement engines for 1970s vintage automobiles. The list price of an engine is CAD 6,600, but they are currently selling at a 10.0% trade discount. Credit terms are 2/10, net 30 and all sales have a one-year return privilege. Seaway sold an engine to an automotive restoration business that pays its own shipping. Seaway expects 5.0% of its engines will be returned based on the company’s previous sales.

**Case 9 – Standalone Warranty Contracts**

Auto Shield sells new car warranties that extend the “bumper-to-bumper” coverage provided by original equipment manufacturers from 60,000 km to 100,00 km.

**Case 10 – Customer Options for Additional Goods**

Hecla Diversified makes spark plugs and agreed to sell 100,000 units to Joseph Automotive for CAD 2.00 each. As an incentive to attract a new customer, Joseph will receive a 10.0% discount on the next 100,000 units if purchased within two years.

**Case 11 – Subsidized Customer Financing**

Sam Slick's Used Cars sold a car on credit to Jennifer Williams. A CAD 15,000, 2-year, non-interest-bearing note receivable was signed. The current market interest rate is 10.0%, compounded monthly.

**Case 12 –** **Revenue Recognition Over Time**

Smith Construction Company signed a CAD 900,000, 3-year, fixed-price contract to build a new warehouse facility for a customer. Its engineers prepared the following estimates:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Year 1** | **Year 2** | **Year 3** |
| Construction costs incurred (CAD) | 125,000 | 495,000 | 145,000 |
| Estimated costs to complete (CAD) | 625,000 | 155,000 | - |
| Non-traceable operating expenses (CAD) | 15,000 | 30,000 | 22,000 |

**REQUIRED:**

1. How should the revenue be recognized in each case?

**Complex EPS at Richmond**

The following is the partial balance sheet for Richmond Company at the end of 2017:

Long-term Liabilities

Bond Payable, 10% per annum, Due January 1, 2026 CAD 150,000

Shareholders' Equity

Common shares, 250,000 outstanding 750,000

Preferred shares, 50,000 outstanding, 300,000

8% cumulative, 2-for-1 conversion

Contributed surplus 55,000

Retained earnings 345,000

Total CAD 1,450,000

**Other information:**

Net income in 2017 was CAD 250,000, which included a discontinued operation loss of CAD 65,000 before tax.

On May 1, 2017, 25,000 shares were repurchased. Fifty thousand new common shares were issued on February 1, 2017.

On May 5, 2016, stock options entitling executives to purchase 25,000 common shares at CAD 5.00 each were issued. These stock options cannot be exercised for five years. Richmond’s share price averaged CAD 7.50 in 2017.

On July 2, 2017, bonds with a face value of CAD 25,000 were converted. The bonds are sold in CAD 1,000 denominations and convertible into 300 common shares each. No preferred shares were converted during the year, and Richmond Company failed to pay dividends. The bonds and preferred shares have been outstanding for two years.

The tax rate is 30.0%. Dividends on the common and preferred shares are paid quarterly on April 1, July 1, October 1, and January 1. The bond interest is paid semi-annually on July 1 and January 1. The accounting period is the calendar year.

**REQUIRED:**

1. Calculate earnings per share for 2017.

**Complex EPS at Inkster**

The following is the shareholders' equity section of Inkster Ltd. on December 31, 2010:

CAD 2.10 cumulative preferred shares,

3-for-1 convertible, 480,000 outstanding CAD 10,370,000

Common shares, 8,890,000 outstanding 26,670,000

Retained earnings 28,650,400

The company's 2010 net income was CAD 5,850,000. Net income included a CAD 1,650,000 discontinued operation loss after tax.

One hundred and fifty thousand shares were sold on March 1, 2010.

The convertible preferred shares were issued in 2005. Dividends are paid quarterly, but the December 31 dividend payment was not made due to a cash shortage. On June 30, 2010, 75,000 preferred shares were converted to common shares after receiving the dividends.

Inkster had 6.0% convertible bonds with a face value of CAD 14,500,000 outstanding during 2010. They were issued in 2007 at par and are due at the end of 2016. The conversion rate is 250 common shares for each CAD 1,000 bond, but no conversions were made in 2010.

On August 1, 2008, Inkster granted options to senior executives to purchase 276,000 common shares at CAD 6.10 per share. The options are not exercisable for 5 years. The average weekly market price in 2010 was CAD 8.50 per share.

Inkster’s income tax rate is 30.0%.

**REQUIRED:**

1. Calculate basic and diluted EPS in 2010.

**Complex EPS at Jasbar**

The following is the partial balance sheet for Jasbar Company at the end of 2017:

Long-term Liabilities

Bonds Payable, 12% per annum, due January 1, 2015 CAD 250,000

Shareholders' Equity

Common shares, 100,000 outstanding 554,000

Preferred shares, 50,000 outstanding,

CAD 1 cumulative, 1-for-1 conversion 289,000

Contributed surplus 54,000

Retained earnings 259,000

Total CAD 1,156,000

Other information:

Net income in 2017 was CAD 58,000, which includes a discontinued operation loss of CAD 15,000 before tax. Six thousand common shares were issued on March 9, 2017. The company repurchased ten thousand common shares on October 1, 2017.

Ten thousand stock options with an exercise price of CAD 6.00 were issued as part of an executive compensation plan on May 1, 2015. The options cannot be exercised for four years. The average market price during the year was CAD 4.00.

Bonds with a face value of CAD 50,000 were converted on July 2, 2017. Each CAD 1,000 bond is convertible into 185 common shares.

Dividends on the common and preferred shares are paid quarterly on April 1, July 1, October 1, and January 1. Interest on the bond issue is paid semi-annually on June 30 and December 31. The tax rate is 35.0%. The accounting period is the calendar year.

**REQUIRED:**

1. Calculate earnings per share for 2017.

**Complex EPS at Kamloops**

The following is the partial balance sheet for Kamloops Company at the end of 2015:

**Long-term Liabilities**

Bonds Payable, 9% per annum, due January 1, 2021 CAD 100,000

**Shareholders' Equity**

Common shares, 100,000 authorized, issued, outstanding 345,000

Preferred shares, 50,000 authorized, issued, outstanding

CAD 1.50 per share cumulative, 1 for 1 conversion 240,000

Contributed surplus 49,000

Retained earnings 543,000

**Other information:**

Net income in 2015 was CAD 90,000, which includes a loss on discontinued operations of CAD 55,000 net of tax. Eight thousand common shares were issued on August 1, 2015. The company repurchased four thousand common shares on September 1, 2015.

Five thousand stock options with an exercise price of CAD 4.50 were issued as part of an executive compensation plan in 2013. The options cannot be converted till 2018. The average common share price in 2015 was CAD 6.25.

The 50,000 preferred shares were issued in 2010. Each CAD 1,000 face value bond is convertible into 120 common shares. The bonds were initially issued in 2013.

Kamloops Company did not pay dividends in 2015 due to a cash shortage. The tax rate is 25.0%. The accounting period is the calendar year.

**REQUIRED:**

1. Calculate basic and diluted earnings per share for 2015.