

NATIONAL UNIVERSITY OF SINGAPORE

EC2204: Financial Accounting for Economists

Semester 2, AY2018-2019

Time allowed: 2 Hours

INSTRUCTIONS TO CANDIDATES

1. Write your student number only. Do not write your name.
2. This assessment paper contains FIVE (5) questions and comprises EIGHT (8) printed pages, including this page.
3. Answer ALL questions.
4. Start each question on a new page.
5. This is a CLOSED book examination.
6. You may use a scientific (non-graphing) calculator.
7. The total mark for this paper is 50.

Question 1:

The Financial Statements of Ryder Corporation are as follows:

Ryder Corporation
Comparative Balance Sheet
31 December

| | <u>2018</u> | <u>2017</u> |
|--|------------------|------------------|
| Assets | | |
| Cash | \$44,000 | \$28,000 |
| Accounts receivable | A | 32,000 |
| Inventories | B | 70,000 |
| Prepaid rent | 2,500 | 2,000 |
| Property, plant, and equipment | 224,000 | 200,000 |
| Accumulated depreciation | <u>(55,000)</u> | <u>(40,000)</u> |
| Total assets | <u>\$341,500</u> | <u>\$292,000</u> |
| Liabilities and Stockholders' Equity | | |
| Accounts payable | \$38,000 | \$34,000 |
| Accrued liabilities | 10,000 | 12,000 |
| Notes payable (long-term) | 130,000 | 150,000 |
| Contributed capital | 50,000 | 25,000 |
| Retained earnings | <u>113,500</u> | <u>71,000</u> |
| Total liabilities and stockholders' equity | <u>\$341,500</u> | <u>\$292,000</u> |

Ryder Corporation
Income Statement
Year Ended 31 December 2018

| | | |
|---|-----------|------------------|
| Sales | | \$477,500 |
| Expenses | | |
| Cost of goods sold | \$290,000 | |
| Selling, general, and administrative expenses | 94,000 | |
| Depreciation expense | C | |
| Interest expense | 9,000 | |
| Income taxes | <u>D</u> | <u>425,000</u> |
| Net income | = | <u>\$ 52,500</u> |

Ryder Corporation
Cash Flow Statement
Year Ended 31 December 2018

Cash Flows from Operating Activities

| | |
|--|-----------------|
| Net income | \$52,500 |
| Adjustments to reconcile net income to net cash provided by operating activities: | |
| Depreciation | 15,000 |
| Changes in current assets and current liabilities: | |
| Accounts Receivable | (4,000) |
| Inventories | (20,000) |
| Prepaid Expenses | E |
| Accounts Payable | 4,000 |
| Accrued Liabilities | <u>F</u> |
| Net cash provided by (used in) operating activities | <u>G</u> |
| Cash flows from investing activities | |
| Purchase of property, plant, and equipment | <u>(24,000)</u> |
| Net cash provided by (used in) investing activities | <u>(24,000)</u> |
| Financing activities | |
| Additional capital contributed by stockholders | H |
| Payments on long-term debt | (20,000) |
| Payment of cash dividends | <u>I</u> |
| Net cash provided by (used in) financing activities | <u>J</u> |
| Increase in cash and cash equivalents | 16,000 |
| Cash and cash equivalents, beginning of period | <u>28,000</u> |
| Cash and cash equivalents, end of period | <u>\$44,000</u> |

A cash dividend was declared and paid in full to stockholders during the year.

(10 marks) Solve for the missing numbers. Label your answers (from A to J) clearly.

Question 2:

(a) Everest Corporation has the following financial information:

| | |
|-----------------------|------------|
| Current assets | \$ 430,000 |
| Long-lived assets | 1,070,000 |
| Current liabilities | 120,000 |
| Long-term liabilities | 630,000 |
| Contributed capital | 100,000 |
| Retained earnings | 650,000 |

A long-term debt covenant specifies that Everest Corporation's debt/equity ratio cannot be greater than 1.0 and current ratio cannot be less than 2.0.

Everest Corporation is currently 100% owned by Mr. Everest. It plans to invest \$500,000 in a new machine that will keep the company in an excellent competitive position in a very competitive industry.

In order to finance this investment, Everest Corporation plans to use its cash, issue long-term debt, and issue common shares (to others) – Proposal 1.

Mr. Everest will support Proposal 1 only if he is able to retain at least 50% ownership in the corporation (after the issuance of new shares).

- (i) (3 marks) Explain why Mr. Everest will not support Proposal 1.
- (ii) (3 marks) Propose an alternative way for Everest Corporation to finance the machine such that it can adhere to the debt covenants and allow Mr. Everest to retain at least 50% ownership.

- (b) Chase Corporation had the following balances in its shareholders' equity accounts on the date 31 December 2017:

| | |
|---|------------------|
| Share Capital – Ordinary, \$10 par, 50,000 shares authorized, | |
| 20,000 shares issued..... | \$200,000 |
| Share Premium – Ordinary..... | 250,000 |
| Retained Earnings..... | 500,000 |
| Treasury Shares, 1,000 shares..... | (20,000) |
| Total shareholders' equity..... | <u>\$930,000</u> |

The following transactions occurred during 2018:

| | |
|-------------|--|
| 3 February | Issued 3,000 ordinary shares for \$22 per share |
| 10 May | Declared a \$0.50 per share dividend on ordinary shares. |
| 12 October | Sold 500 treasury shares for \$20 per share. |
| 31 December | Net profit for the year was determined be \$75,000. |

- (4 marks) Based on the above information, prepare a statement of changes in equity for 2018.

Question 3:

- (a) (4 marks) Discuss the limitations of using historical cost to value assets in an inflationary environment.
- (b) Rocky Corporation began operations on 1 January 2018. Its Financial Statements on 31st December 2018 are as follows:

Income Statement

| | |
|-----------------------|-----------------|
| Sales revenue | \$20,000 |
| Cost of goods sold | <u>9,000</u> |
| Gross profit | \$ 11,000 |
| Depreciation (Note 1) | <u>3,000</u> |
| Net income | <u>\$ 8,000</u> |

Balance Sheet

| | | |
|--|----------------|-----------------|
| Current assets | | \$44,000 |
| Equipment | \$20,000 | |
| Accumulated depreciation | <u>(3,000)</u> | <u>17,000</u> |
| Total assets | | <u>\$61,000</u> |
| Liabilities (all current) | | \$45,000 |
| Shareholders' equity | | <u>16,000</u> |
| Total liabilities & shareholders' equity | | <u>\$61,000</u> |

Note 1: Equipment was purchased on January 1. Straight-line depreciation method was used with an estimated economic life of 5 years.

- (i) (1 mark) Determine the estimated salvage value of the equipment being depreciated using the straight-line method.
- (ii) (2 marks) Suppose Rocky Corporation used double-declining-balance depreciation method instead. Present the new Income Statement and Balance Sheet.
- (iii) (3 marks) Evaluate Rocky Corporation's current ratio, debt/equity ratio, and debt to assets ratio using the straight-line and double-declining-balance methods of depreciation.

Question 4:

- (a) On 1 January 2019, Zuma Incorporated plans to issue long-term debt in order to obtain money required to finance the purchase of equipment. It will have to pay a market rate of interest of 10% on this borrowed money.

Zuma is considering two different financial instruments in order to obtain \$10,494. The first instrument being considered is a 3-year, 12%, \$10,000 note with interest payable every December 31 over the life of the note. Alternatively, a 3-year, non-interest-bearing note with maturity value of \$13,657 will be issued.

(4 marks) Discuss the impact on Zuma's 1 January 2019 balance sheet and 2019 income statement if Zuma chooses to issue the non-interest-bearing note instead of the 12% note.

- (b) (6 marks) Explain how the following transactions affect the current liabilities of a company:

- (i) Purchased supplies on account.
- (ii) Paid accounts payable.
- (iii) Issued a \$1,000 short-term note payable for \$970.
- (iv) A portion of long-term debt is due next year.
- (v) Declared cash dividends to holders of stock.
- (vi) Paid the cash dividend previously declared.
- (vii) Received money from customers prior to delivery of the product to the customer.
- (viii) Delivered products to a customer who previously paid for that product.
- (ix) Accrued a bonus amounting to 5% on reported income to the CEO.
- (x) In a lawsuit filed against the firm, counsel indicates that the potential \$10,000 loss is remote.

Question 5:

- (a) On 31 May 2018 (its financial year-end), Skye Limited has \$375,800 of accounts receivable. Skye Limited uses the allowance method of accounting for bad debts and has an existing credit balance in the allowance for doubtful accounts of \$14,250.

(4 marks) Prepare journal entries to record each of the following events for Skye Limited.

- (i) Sold \$415,200 of merchandise (that cost \$249,000) to customers on credit.
- (ii) Received \$465,800 cash in payment of accounts receivable
- (iii) Wrote off \$15,800 of uncollectible accounts receivable.
- (iv) In adjusting the accounts on 31 May 2018, the company estimated that 4.0% of accounts receivable will be uncollectible.

- (b) Marshall Farms is an American based company that exports wheat to Bundesbakery, a bakery based in Germany. Marshall Farms reports its financial statements using the U.S. dollars, while Bundesbakery only accepts Euros.

(6 marks) Prepare journal entries to record each of the following events for Marshall Farms.

- (i) **15 Nov 2010:** Marshall Farms sold wheat to Bundesbakery at a price of 2 million Euros, due in 90 days. The current exchange rate is 0.8 U.S. dollars per Euro. (Note that Marshall Farms uses the periodic inventory method.)
- (ii) **3 Dec 2010:** Marshall Farms made a year-end adjusting entry relating to the account receivable from Bundesbakery. The exchange rate at year-end is 0.85 U.S. dollars per Euro.
- (iii) **15 Feb 2011:** Received a check for \$1,640,000 from Deutsche Bank in full settlement of the receivable from Bundesbakery. The exchange rate at this date is 0.82 U.S. dollars per Euro.

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