JAIPURIA

JAIPURIA INSTITUTE OF MANAGEMENT, Noida

PGDM/SM/M

FOURTH TRIMESTER (Batch 2017-19)

END TERM EXAMINATIONS (October, 2018)

SET NO.: 1

| Course Name | Financial Management-II (FM-II) | Course Code | FIN404 |
|-------------|---------------------------------|-------------|--------|
| Max. Time | 2 hours | Max. Marks | 40 |

Instructions: Attempt all the questions.

Q1. Four years ago, Inga Sorenson bought six-year, 5.5 per cent coupon bonds issued by AGA AB for SKr 947.68. If she sells these bonds at the current price of SKr 894.52, what will be the realised yield on the bonds? Assume annual coupons on similar coupon-paying bonds. (5 marks)

Q2. Last year Rattner Robotics had \$5 million in operating income (EBIT). Its depreciation expense was \$1 million, its interest expense was \$1 million, and its corporate tax rate was 40%. At year-end, it had \$14 million in current assets,

\$3 million in accounts payable, \$1 million in accruals, and \$15 million in net plant and equipment. Assume that Rattner's only noncash item was depreciation.

a. What was the company's net income? (2 marks)

b. What was its net working capital (NWC)? (2 marks)

c. Rattner had \$12 million in net plant and equipment the prior year. Its net working capital has remained constant over time. What is the company's free cash flow (FCF) for the year that just ended? (3 marks)

Q3. What is capitalization of interest and its importance in regulated utilities companies? Draw a table as mentioned below and identify the effect (higher or lower) of interest capitalization and expensing on each component. Justify your answer with suitable example. (10 marks)

| Overall | Initially | | Later years | |
|----------------------------|--|-----------|--------------|-----------|
| | Capitalizing | Expensing | Capitalizing | Expensing |
| Net Income | The second s | | | |
| EBIT | | | | |
| EBITDA | | | | |
| CFO · | | · · · · | | |
| CFI | | | | |
| Total asset turnover ratio | | | | |
| Fixed asset turnover ratio | | | | |
| ROA | | | | |
| ROE | | | | |
| Time interest earned | | | | |

Q4. Read the case and answer below questions:

- a. Calculate those ratios that you think would be useful. (5 marks)
- b. Construct a DuPont equation and compare the company's ratios to the industry average ratios. (5 marks)
- c. Do the balance sheet accounts or the income statement figures seem to be primarily responsible for the low profits? (5 marks)
- d. Which specific accounts seem to be most out of line relative to other firms in the industry? (3 marks)

[P.T.O. for the Case)

DuPONT ANALYSIS A firm has been experiencing low profitability in recent years. Perform an analysis of the firm's financial position using the DuPont equation. The firm has no lease payments but has a \$2 million sinking fund payment on its debt. The most recent industry average ratios and the firm's financial statements are as follows:

| Industry Average Ratios | | | |
|-------------------------|----------|-------------------------|--------|
| Gurrent ratio | 2× | Fixed assets turnover | 6× |
| Debt/total assets | 30% | Total assets tumover | З× |
| Times interest earned | 7× | Profit margin | 3% |
| EBITDA coverage | 9× | Return on total assets | 9% |
| Inventory tumover | 10× | Return on common equity | 12.86% |
| Days sales outstanding* | .24 days | | |

"Calculation is based on a 365-day year.

| Balance | Sheet as of Dece | mber 31, 2008 (Millions of Dollars) | |
|----------------------|------------------|-------------------------------------|--------|
| Cash and equivalents | \$ 78 | Accounts payable | \$ 45 |
| Net receivables | 66 | Notes payable | 45 |
| Inventories | 159 | Other current liabilities | 21 |
| Total current assets | \$303 | Total current liabilities | \$111 |
| | | Long-term debt | 24 |
| | | Total liabilities | \$135 |
| Gross fixed assets | 225 | | |
| Less depreciation | 74 | Common stock | 114 |
| Net fixed assets | \$147 | Retained earnings | _201 |
| | | Total stockholders' equity | \$315 |
| Total assets | 5450 | Total liabilities and equity | \$4.50 |
| | | | |

Income Statement for Year Ended December 31, 2008 (Millions of Dollars)

| Net sales | \$795.0 |
|---|---------|
| Cost of goods sold | 660.0 |
| Gross profit | \$135.0 |
| Selling expenses | 73.5 |
| EBITDA | \$ 61.5 |
| Depreciation expense | 12.0 |
| Earnings before interest and taxes (EBIT) | \$ 49.5 |
| Interest expense | 45 |
| Earnings before taxes (EBT) | \$ 45.0 |
| Taxes (40%) | 18.0 |
| Net income | \$ 270 |