## BEFM011

## UNIVERSITY OF EXETER

## SCHOOL OF BUSINESS AND ECONOMICS

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FINANCIAL STATEMENT ANALYSIS

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## Duration: 2 HOURS

Answer ALL multiple choice questions in Section A.
All questions in Section A carry 5 marks each
(20 questions $\times 5$ marks = 100 marks)
Answer ANY TWO questions from Section B.
Questions in Section B carry 100 marks each.
Calculators permitted.
Closed Note.

Total marks awarded out of $\mathbf{3 0 0}$ are scaled to $\mathbf{1 0 0}$ per cent.

## Section A; Multiple Choice Questions

You must answer ALL questions in this section.
Use the following information to address questions 1 to 3 .

| Exeter Inc. <br> Balance Sheet | 2007 | 2006 |
| :--- | :---: | :---: |
| Assets |  |  |
| Current assets | $\$ 290,000$ | $\$ 100,000$ |
| Cash | 250,000 | 200,000 |
| Accounts receivable | 740,000 | 800,000 |
| Inventory | $\$ 920,000$ | $\$ 900,000$ |
| Fixed assets | $(290,000)$ | $(250,000)$ |
| Property, plant \& equipment | $\$ 630,000$ | $\$ 650,000$ |
|  | 10,000 | 10,000 |
| less: Accumulated depreciation |  |  |
| Net property, plant and equipment | $\$ 1,920,000$ | $\$ 1,760,000$ |
| Goodwill | 5465,000 | $\$ 442,000$ |
| Total assets | 5,000 | 8,000 |
| Liabilities | 15,000 | 10,000 |
| Current liabilities | 10,000 | 5 |
| Accounts payable |  |  |
| Wages payable | $\$ 535,000$ | $\$ 585,000$ |
| Interest payable | 100,000 |  |
|  |  | 0 |
| Dividends payable | $\$ 430,000$ | $\$ 400,000$ |
| Non-current liabilities | 360,000 | 310,000 |
| Mortgage | $\$ 1,920,000$ | $\$ 1,760,000$ |
| Bank Loan |  |  |
| Stockholders' equity |  |  |
| Common stock |  |  |
| Retained earnings |  |  |
| Total liabilities \& stockholders' equity |  |  |

Income Statement for 2007 in $\$ 000$ s:

## Sales

Cost of goods sold
Depreciation
Interest expense
Gain on sale of old machine
Taxes
Net income
\$1,425
1,200
100 30 10 45 \$60

Dividends declared to shareholders were \$10,000.
New common shares were issued at par for $\$ 30$.

Fixed assets were sold for $\$ 30,000$. Original cost of these assets was $\$ 80,000$ and $\$ 60,000$ of accumulated depreciation has been charged to their original cost.
\$100,000 was borrowed on a 10 year bank loan, in order to buy equipment. Depreciation for the year was $\$ 100,000$ (depreciation charge of $\$ 40,000$ and depreciation on sold assets of $\$ 60,000$ ).

## Question 1

Using the indirect method, cash flow from operations equals:
A. \$ 125,000
B. $\$ 145,000$
C. \$ 165,000
D. $\$ 185,000$ ?

## Question 2

Cash flows from financing activities equal:
A. $\$(90,000)$
B. \$ 65,000
C. $\$ 75,000$
D. $\$ 85,000$ ?

## Question 3

Free cash flow available to shareholders is:
A. \$ 115,000
B. $\$ 165,000$
C. \$ 195,000
D. $\$ 215,000$ ?

## Question 4

Which of the following would NOT be an accounting gimmick associated with shifting current period expenses to an earlier or future period?
A. Changing depreciation methods from straight line to an accelerated method.
B. Reclassifying costs that have been capitalised as normal operating expenses.
C. Amortising costs over longer periods of time.
D. Recording investment income or gains as revenue.

## Question 5

Which of the following accounting practices would be considered conservative?
A. Using the straight-line method of depreciating a fixed asset over a longer period of time.
B. Capitalising advertising costs.
C. Using LIFO methods to measure inventories and cost of goods sold.
D. Amortising the legal costs of a patent filing over more than 20 years.

## Question 6

A firm's financial statements disclose its tax rate as $40 \%$ and the beginning of period LIFO reserve as $\$ 55,000$ and the ending period LIFO reserve is $\$ 65,000$; what are the financial statement adjustments to adjust end of period LIFO inventory to FIFO inventory?
A. Add \$10,000.
B. Subtract $\$ 10,000$.
C. Add $\$ 65,000$.
D. Subtract $\$ 65,000$.

## Question 7

Using the figures in question 6 above, to adjust the LIFO after tax income to FIFO after tax income:
A. Increase it by $\$ 6,000$.
B. Decrease it by $\$ 6,000$.
C. Increase it by $\$ 10,000$.
D. Decrease it by $\$ 10,000$.

## Question 8

An analyst gathered the following information about a company: the firm has a deferred tax liability and is expected it will have a decline in its capital expenditure in the future. How should the liability be treated for purposes of comparative analysis?
A. It should be treated as equity at its full value.
B. It should be treated as a liability at its full value.
C. The present value should be treated as a liability with the reminder being treated as equity.
D. It should be considered neither a liability nor equity.

## Question 9

The Go Fast Motor Company takes a full year's depreciation expense in the year of an asset's acquisition and no depreciation in the year of disposal. The following information is given on a depreciable asset:

Acquired in January 2006, with an estimated useful life of five years at a cost of $£ 100,000$, residual value estimated at $£ 20,000$. Accumulated depreciation as at December 2006 was $£ 30,000$.

Assuming Go Fast uses the same method of depreciation in 2007, what will be the charge for 2007
A. $£ 18,000$.
B. $£ 22,000$.
C. $£ 24,000$.
D. $£ 30,000$.

## Question 10

Which of the following revenue recognition techniques recognises sales and costs of goods sold in proportion to cash collections?
A. Sales basis method.
B. Percentage-of-completion method.
C. Completed-contract method.
D. Instalment sales method.

## Question 11

XFI Corp. issues a $\$ 5$ million bond with a 7 per cent coupon rate, 3-year maturity, and annual interest payments when market interest rates are 8 per cent.
What are the annual coupon payments on the bond?
A. $\$ 116,667$
B. $\$ 133,333$
C. $\$ 350,000$
D. $\$ 400,000$

## Question 12

An analyst gathered the following information about a company: the firm has a deferred tax liability and is expected it will have a decline in its capital expenditure in the future. How should the liability be treated for purposes of comparative analysis?
A. It should be treated as equity at its full value.
B. It should be treated as a liability at its full value.
C. The present value should be treated as a liability with the reminder being treated as equity.
D. It should be considered neither a liability nor equity.

## Question 13

If a company reported fictitious revenue, it would most likely try to cover up its fraud by.
A. Decreasing assets
B. Increasing liabilities
C. Creating a fictitious assets
D. Creating a fictitious liability

## Question 14

Which of the following statements about cash received prior to the recognition of revenue in the financial statements is most accurate? The cash is recorded as:
A. Accrued revenue, an asset
B. Deferred revenue, an asset
C. Accrued revenue, a liability
D. Deferred revenue, a liability

At the beginning of 2006, Florida Road Construction entered into a contract to build a road for the government. Construction will take four years. The following information as of 31 December 2006 is available for the contract:

Total revenue according to contract: \$ 10,000,000
Total expected cost: \$8,000,000
Cost incurred during 2006: $\$ 1,200,000$
Under the completed contract method, how much revenue will be reported in 2006?
A. None
B. $\$ 300,000$
C. $\$ 1,500,000$
D. $\$ 10,000,000$

## Question 16

The following information will be used in both Question 16 and 17.
During 2006, Argo Company sold 10 acres of prime commercial zone land to a builder for $\$ 5,000,000$. The builder gave Argo $\$ 1,000,000$ down payment and will pay the remaining balance of $\$ 4,000,000$ to Argo in 2007. Argo purchased the land in 1999 for $\$ 2,000,000$. Using the installment method, how much profit will Argo report for 2006?
A. None.
B. $\$ 600,000$
C. $1,000,000$
D. $3,000,000$

## Question 17

Refer to the information in Question 16.
How much profit will Argo report for 2006 by using the cost recovery method?
A. None.
B. $\$ 600,000$
C. $1,000,000$
D. $3,000,000$

## Question 18

Which of the following actions requires an adjustment to the number of shares outstanding at the beginning of the year?
A. New issuance of common stock for cash
B. Stock repurchases
C. Issuance of common stock in a purchase of assets
D. A stock split

Question 19

Actim Inc. has assets of $\$ 100,000$, liabilities of $\$ 50,000$ and stockholders' equity of $\$ 50,000$. The company decides to issue $\$ 50,000$ of redeemable preferred stock. For the purposes of financial statement analysis, given the total liabilities, debt-to-equity ratio of the firm is:
A. 0.5
B. 1.0
C. 1.5
D. 2.0

## Question 20

What is the impact on a firm's cash flow from operations and cash flow from financing of issuing bonds at a premium to par?

Cash flow from operations Cash flow from financing
A. Understated, Understated
B. Understated, Overstated
C. Overstated, Understated
D. Overstated, Overstated

## Section B: Long Answer Questions

You must answer ANY TWO questions from this section.

## Question B1

Based on the summarised recent financial statement data for a leading UK food retailer, you are expected to:
a) Assess the Return on Equity (ROE) of the firm for the last two years based on a detailed decomposition of its Tax burden, Interest Burden, Earnings Before Interest and Tax (EBIT) margin, Asset turnover and Leverage. Interpret and assess the Return on Equity (ROE) taking into account the typical ratios for this sector (see below).
[50 marks]
b) Examine the Cash Conversion cycle of the firm for the last two years. Interpret and assess your estimates taking into account the typical ratios for this sector (see below).
[50 marks]
[Total marks=100]

|  | Industry |
| :--- | :---: |
| ROE | 0.132 |
| Tax burden | 0.783 |
| Interest burden | 0.927 |
| EBIT Margin | 0.047 |
| Asset Turnover | 1.755 |
| Leverage | 2.127 |
|  |  |
|  |  |
| DSO | 3.423 |
| DOH | 15.093 |
| Days' payables | 33.802 |
| Cash conversion cycle | -15.286 |

*DOH: Days of inventory at hand
*DSO Days of sales outstanding

| BALANCE SHEET | 2007 | 2006 | 2005 |
| :---: | :---: | :---: | :---: |
| Property Plant \& Equipment (Gross) | 7,679 | 7,565 | 7,288 |
| Minus: Accumulated Deprec | 1,474 | 1,447 | 1,144 |
| Property Plant \& Equipment (Net) | 6,205 | 6,117 | 6,144 |
| Investments | 282 | 260 | 262 |
| Other non-current assets | 239 | 228 | 218 |
| Total non-current assets | 6,726 | 6,605 | 6,623 |
|  |  |  |  |
|  |  |  |  |
| Cash and Equivalents | 265 | 231 | 135 |
| Receivables net | 124 | 86 | 89 |
| Inventories | 442 | 368 | 399 |
| Other current assets | 79 | 81 | 197 |
| Total current assets | 910 | 766 | 821 |
|  |  |  |  |
| Total assets | 7,636 | 7,371 | 7,444 |
|  |  |  |  |
| Short Term Debt \& Current |  |  |  |
| Portion Due of Long Term |  |  |  |
| Debt | 77 | 253 | 297 |
| Accounts payable | 1,152 | 1,003 | 1,203 |
| Income taxes payable | 97 | 100 | 39 |
| Other current liabilities | 527 | 499 | 269 |
| Total current liabilities | 1,853 | 1,855 | 1,807 |
|  |  |  |  |
| Long term debt | 774 | 769 | 1,023 |
| Provisions | 207 | 343 | 543 |
| Deferred taxes | 424 | 478 | 423 |
| Other non-current liabilities | 0 | 0 | 0 |
| Total non-current liabilities | 1,405 | 1,589 | 1,989 |
|  |  |  |  |
| Shareholders' equity | 4,378 | 3,927 | 3,649 |
| Reserves | 0 | 0 | 0 |
| Preferred equity | 0 | 0 | 0 |
| Total equity | 4,378 | 3,927 | 3,649 |
| Minority interest | 0 | 0 | 0 |
|  |  |  |  |
| Total liabilities and equity | 7,636 | 7,371 | 7,444 |


| INCOME STATEMENT | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ |
| :--- | ---: | ---: |
|  |  |  |
| Sales | 12,969 | 12,462 |
| Cost of goods/services sold | 11,869 | 11,548 |
| Depreciation/amortisation expense | 282 | 277 |
| Gross income | 818 | 636 |
| Selling General Administrating exper | 268 | 272 |
| Other operating |  |  |
| expense(+)/income(-) | -72 | -43 |
| Profit before interest and taxes | 622 | 408 |
|  |  |  |
| Interest income | 36 | 21 |
| Interest expense | 46 | 59 |
| Net interest expense | 10 | 39 |
| Other expenses(+)/income(-) | 0 | 0 |
|  |  |  |
| Profit before tax | 612 | 369 |
| Tax | 58 | 121 |
| Profit after tax | 554 | 248 |
| Discontinued operations | 0 | 0 |
| Minority interest | 0 | 0 |
| Net profit | 554 | 248 |

## Question B2

a) Two companies have identical values for cash sales less cash inputs and cash operating expenses at $\$ 50,000$. The only difference between the two companies is their financing.

- At the beginning of this year, Company A sold $\$ 1,000,000$ of face value zero-coupon bonds maturing in three years.
- Company B sold \$750,000 of 10 per cent coupon bonds maturing in three years. Assume the market rate of interest on bonds is 10 per cent.
i) How much did Company A receive for its bonds?
[10 marks]
ii) What would interest expense be for Company A over the three years of the bond's life?
[20 marks]
iii) Compute the cash flow from operations for Company $A$ and Company B for year 1 (ignore taxes).
[20 marks]
Assume that both bonds pay interest once per annum and are valued using annual payment assumptions.
b) Describe the recognition of a convertible bond discussing in particular the conversion feature. How would you treat a convertible bond for financial statement purposes, as equity or debt?
[50 marks]
[Total =100 marks]


## Question 3

a) The ability of a firm to generate cash from operations on a consistent basis is one indication of the financial health of the firm. Briefly discuss ways in which the distinction between cash flow from operations and that from investing activities provides an indication of the financial strategy being pursued.
[20 marks]
b) Using the extract below, illustrate which ratios you would suggest appropriate to monitor such activity? What is your interpretation of the abbreviated cash flow statement with regard to a request for a new Ioan?


$$
\begin{aligned}
& {[80 \text { marks }] } \\
{[\text { Total }=} & 100 \text { marks] }
\end{aligned}
$$

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## Question 4

When preparing a consolidation, a multi-national business has to reflect the taxes paid in the various countries in which it is operating as well as that of its own country. Multinationals also have an objective of tax minimisation. Outline how these two different requirements may impact upon financial reporting by the parent when choosing accounting policies, as well as the different impacts these may have on actual as well as deferred tax. Provide illustrations of their implementation and of how they may affect distributable profits.
[Total = 100 marks]

## Question 5

(a) During 2007, Devizes Inc. had a net income of $\$ 250,000$ and paid dividends of $\$ 120,000$ to its preferred stockholders and $\$ 85,000$ to its common shareholders. Devizes's common stock account showed the following:

01/01/07 Shares issued and outstanding at the beginning of the year 20,000
05/01/07 Shares issued 7,000
08/01/07 5\% stock dividend
10/01/07 Shares repurchased for the treasury 5,000
Compute the weighted average number of common shares outstanding during 2007 and compute EPS.
[25 marks]
b) During 2007, Postal Corp reported net income of $\$ 185,500$ and had 240,000 shares of common stock outstanding for the entire year. Postal also had 2,000 shares of 12 percent, par $\$ 100$ preferred stock outstanding during 2007. During 2006, Postal issued 800, $\$ 1,000$ par, 8 percent bonds for $\$ 800,000$ (issued at par). Each of these bonds is convertible to 100 shares of common stock. The tax rate is 30 percent. Compute basic and diluted EPS for 2007.
[35 marks]
(b) In September 2008 Microsoft announced it will increase the company's quarterly dividend by $18.2 \%$. In addition to the dividend increase, the company announced a $\$ 40$ billion stock buy-back programme over the next five years. Based on the projected June 2009 earnings estimate of $\$ 2.15$, the projected payout ratio is $24 \%$ versus $20 \%$. It also reported it had returned $\$ 115$ billion to its shareholders by way of stock repurchase and dividends over the last five years. The market reaction remained negative despite its 'cash mountain'.

Describe two financial theories relating to dividend policy which might explain the market reaction to Microsoft's dividend increase and its buy-back programme.

$$
\begin{aligned}
& {[40 \text { marks }] } \\
{[\text { Total }=} & 100 \text { marks }]
\end{aligned}
$$

## End of Paper

