ACCOUNTING: A USER PERSPECTIVE

GBAT9120

SUPERVISED OPEN BOOK EXAMINATION

Time Allowed: 3 hours
Plus Reading Time: 10 minutes
Total Marks: 100 marks

INSTRUCTIONS

1. This is a supervised open book examination. Course study guide, prescribed textbook, self-made notes, pens, and a non-programmable calculator may be brought into the examination room. No laptop computers or other handheld electronic devices are permitted.

2. Your reading time before the examination is 10 minutes. No writing may be undertaken during reading time.

3. There are EIGHT (8) COMPULSORY QUESTIONS. There is no internal choice. Questions are not of equal value.

4. Questions 1–4 are to be completed ON THIS EXAMINATION PAPER. Questions 5–8 are to be completed in an examination booklet.

5. Answers must be in blue or black ink (not pencil).

6. This exam paper must be returned. No materials are to be retained at the conclusion of the exam.

7. The exam contributes 55% towards your final grading in this course.

Please complete the following details:

Family Name: ____________________________________________

Other Name: ____________________________________________

Student No.: ____________________________________________
QUESTION 1 [17 Marks]

The following transactions occurred between 1 July 2011 and 30 June 2012 for Carson Limited. Carson Limited uses a perpetual inventory system.

(a) Issued shares for $600,000 cash.
(b) Bought $70,000 inventory on credit.
(c) Paid $56,000 to accounts payable.
(d) Sold inventory costing $120,000 for $340,000. All sales are on credit.
(e) Declared and paid dividends of $60,000.
(f) Borrowed $200,000 on 1 July 2011. The loan is payable on 1 July 2015 and carries a 10% per annum interest rate. Paid $15,000 interest on the loan.
(g) On 1 June received a deposit of $80,000 for work to be carried out in the next year.
(h) Paid salaries of $180,000. Salaries of $40,000 had been earned by employees but not paid at year end.
(i) Used $22,000 of electricity during the year for which the company has not yet been billed.
(j) Paid $24,000 on an insurance policy on 1 October 2011, covering the period 1 October 2011 to 30 September 2012.

Required:

1. List all revenues (including dollar amounts) that will appear in the income statement for the year ending 30 June 2012. [2 Marks]

2. List all expenses (including dollar amounts) that will appear in the income statement for the year ending 30 June 2012. [6 Marks]
3. Calculate cash flow from operations for the year ending 30 June 2012. [4 Marks]

4. Show the current liabilities section of the balance sheet at 30 June 2012. Assume opening balances of current liabilities are zero. [5 Marks]
**QUESTION 2** [8 Marks]

Indicate the impact that each of the following errors or omissions in 2012 would have on a company’s 2012 net profit, assets and liabilities (year end is 31 December). Ignore the impact of taxation.

**Place the symbols U = Understate, O = Overstate or NE = No Effect in the appropriate box.** Be sure to place an answer in every box including dollar amounts.

(a) Capitalised research costs of $200,000 that should have been expensed.

(b) Underestimated the allowance for doubtful debts by $10,000.

(c) Did not record depreciation of $20,000.

(d) Did not adjust unearned revenue account to reflect that $18,000 was earned by year end.

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Net Profit</th>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTION 3 [18 Marks]

Please circle the correct response (A, B, C, D or E) to each of the following multiple choice questions.

1. Which of the following is not part of cash flow from financing?
   A. Borrowing cash from the bank.
   B. Issue of shares.
   C. Payment of a dividend.
   D. Equipment bought for cash.

2. The following information is extracted from a balance sheet at 30 June 2013. What is the balance of total assets at 30 June 2013?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>$200,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$150,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>$30,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$20,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$30,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>$80,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

   A. $200,000
   B. $210,000
   C. $290,000
   D. None of the above.

3. Given the following information, how much revenue would be recognised in June?
   1. Credit sales of $100,000 in June, 20% to be collected in June
   2. Collected $90,000 in June from customers for May sales
   3. Received a deposit in June from a customer for $60,000 for work to be carried out in August

   A. $90,000
   B. $100,000
   C. $190,000
   D. $250,000

4. If a company pays a 12 month insurance premium for $48,000 on 1 June 2013, at 30 June 2013 the accounts will show:
   A. A prepayment of $44,000 in the balance sheet and an insurance expense of $4,000 in the income statement.
   B. A prepayment of $4,000 in the balance sheet and an insurance expense of $44,000 in the income statement.
   C. $48,000 asset in the balance sheet.
   D. $48,000 expense in the income statement.
   E. None of the above.
5. Consider the following accounts:
   (i) Prepayments
   (ii) Unearned revenue
   (iii) Accrued expenses
   (iv) Accrued revenue

Which of the above are liabilities?

A. (iii) only
B. (ii) and (iii) only
C. (ii), (iii) and (iv) only
D. (i), (ii) and (iii) only
E. (i), (iii) and (iv) only

6. During 2012 Canberra Ltd makes cash sales of $160,000 and credit sales of $1,600,000. $1,200,000 of the credit sales was collected by year-end. It pays $360,000 in expenses and accrued expenses increases by $120,000 during 2012. In addition, Canberra Ltd declared and paid dividends of $160,000. Depreciation for the year amounts to $80,000. What is Canberra Ltd’s net profit for 2012?

A. $1,200,000
B. $1,040,000
C. $840,000
D. $1,080,000
E. None of the above.

7. Using the following information, what was the amount of cash received from customers during the year?

<table>
<thead>
<tr>
<th></th>
<th>1 July 2012</th>
<th>30 June 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable</td>
<td>105,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>75,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>230,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Credit Sales</td>
<td>500,000</td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>200,000</td>
<td></td>
</tr>
</tbody>
</table>

A. $495,000
B. $500,000
C. $505,000
D. $545,000
E. None of the above.

8. The prepaid insurance expense account showed an opening balance of $22,000 and a closing balance of $25,000. Insurance expense was $67,000. What was the cash payment for insurance?

A. $64,000
B. $67,000
C. $70,000
D. None of the above.
9. The wages payable account showed an opening balance of $27,000 and a closing balance of $42,000. Wages expense was $590,000. What was the cash payment for wages?

A. $575,000  
B. $590,000  
C. $605,000  
D. None of the above.

10. If a company neglects to make an adjustment for accrued expenses:

A. Profit will be overstated and liabilities understated.  
B. Profit will be overstated and liabilities overstated.  
C. Profit will be overstated and assets understated.  
D. Profit will be understated and liabilities overstated.

Use the following information to answer the following two questions
Sydney Ltd is a large retailer of hardware equipment that sells its products through a network of suburban stores. Shown below are the calculation of some of its key ratios for 2013 and 2012.

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Stockholders Equity (ROE)</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Return on Assets (ROA)</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Asset Turnover</td>
<td>.50</td>
<td>.60</td>
</tr>
<tr>
<td>Days in Inventory</td>
<td>72 days</td>
<td>55 days</td>
</tr>
<tr>
<td>Days in Debtors</td>
<td>50 days</td>
<td>50 days</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>1.6:1</td>
<td>1.5:1</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>0.9:1</td>
<td>1.1:1</td>
</tr>
<tr>
<td>Debt to Equity Ratio</td>
<td>1.4:1</td>
<td>1.0:1</td>
</tr>
</tbody>
</table>

11. Which ratio above explains why ROE and ROA move in different directions in 2013 (relative to 2012)?

A. Profit Margin  
B. Asset Turnover  
C. Current Ratio  
D. Debt to Equity Ratio

12. Which of the above ratios explains why ROA has decreased from 2012 to 2013?

A. Profit Margin  
B. Asset Turnover  
C. Current Ratio  
D. Debt to Equity Ratio
13. If the last wages bill for the year is paid on 27 December and $100,000 is owing at 31 December in unpaid wages:
   A. The $100,000 would appear in the balance sheet but it would not be included in the expenses for the year.
   B. The $100,000 would appear in the balance sheet and would be included in the expenses for the year.
   C. The $100,000 would not be included in either the balance sheet or the income statement.
   D. The $100,000 would appear as an expense in the income statement but would not appear in the balance sheet.

14. R Ltd has the following balance sheet information on 30 June 2013.

<table>
<thead>
<tr>
<th></th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>800,000</td>
</tr>
<tr>
<td>Allowance for doubtful debts</td>
<td>(27,200)</td>
</tr>
<tr>
<td>Accounts receivable net</td>
<td>772,800</td>
</tr>
</tbody>
</table>

On 30 June 2013 the company receives notification from S Ltd that it has filed for bankruptcy. The controller of R Ltd decides to write off S Ltd's account for $7,100. Which of the following statements is true?
   A. Net profit and net accounts receivable will decrease.
   B. Net profit will decrease but no change will occur in net accounts receivable.
   C. No change will occur in net profit but net accounts receivable will decrease.
   D. Neither net profit or net accounts receivable will decrease.

15. When unearned revenue increases:
   A. Cash increases.
   B. An expense increases.
   C. An expense decreases.
   D. Revenue increases.

16. Consider the following transactions:
   (i) Borrowed $700,000 from the bank
   (ii) Sale of inventory on credit for $800,000
   (iii) Issued shares for $1.2 million
   (iv) Cash sales of $480,000

Which of the above transactions increased revenue?
   A. (iv) only
   B. (ii) and (iv) only
   C. (ii), (iii) and (iv) only
   D. (i), (ii) and (iv) only
   E. None of the above.
17. Red Shoes Ltd has gone bankrupt and will not pay $10,000 to XYZ. XYZ has accounts receivable of $12m and an allowance for doubtful accounts of $500,000. XYZ does not adjust the accounts for the $10,000 which will not be paid by Red Shoes Ltd. Which of the following is true concerning the financial statements?

A. There is an understatement of net profit.
B. There is an overstatement of total assets and net profit.
C. There is an understatement of total assets and net profit.
D. There is no effect on total liabilities, assets or net profit.

18. On 1 January 2012 Story Company had $60,000 of retained profits. During 2012 it earned net profit of $100,000 and declared and paid dividends of $15,000. In addition, the company received cash of $25,000 as an additional investment by its owners. Therefore, the ending balance in retained profits at 31 December 2012 would be:

A. $110,000
B. $130,000
C. $145,000
D. $170,000
E. None of the above.
QUESTION 4 [12 Marks]

At present the current and debt to equity ratios for Simmons Limited are as follows:

Current ratio 1.5  
Debt-to-equity ratio 1.8:1

For each of the independent transactions listed below, determine whether the ratio will increase, decrease, or no effect as a result of the proposed transaction. Note that a blank response will be marked as incorrect.

1. Purchase $8,000 of inventory on credit.  
2. Pay $50,000 of payables.  
3. Receive $20,000 deposit on a job that will be done in the next financial year.  
4. Borrow $60,000 using a long-term bank loan.  
5. Increase depreciation expenses by $30,000.  
6. Issue additional shares for $50,000.

Provide your answer in the table below.

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Current Ratio</th>
<th>Debt-to-Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTION 5 [14 Marks]

Opera Ltd has been offered a special-purpose machine at a cost of $460,000. The machine is expected to have a useful life of three years, with an estimated terminal salvage value of $90,000. It will result in additional revenue of $210,000 per year and additional cash operating costs of $80,000 per year. Energy savings of $70,000 per year will be made. The company uses straight-line depreciation based on cost for both accounting and tax purposes. The new machine will take up additional space. As a result, Opera Ltd will no longer receive rent of $40,000 per year for space it presently sub-leases to ABC. Additional working capital of $25,000 will be needed to cover additional inventory costs. This amount will be fully recoverable at the end of the machine’s useful life.

Required:

1. Assuming zero taxes and the company’s required rate of return is 10%, calculate the NPV of the project. [10 Marks]

2. If the tax rate is 30% what would be the tax impact on NPV in Year 3? [4 Marks]
QUESTION 6 [12 Marks]

M Ltd has manufactured and sold outdoor clothing for many years. Product A and Product B are a recent introduction to its product lines. While sales have expanded rapidly since the introduction of Product A and Product B, the company’s profits appear to have declined and management is concerned that this might be the result of inaccuracies in the costing systems that are in use.

Part A

The current costing system for M Ltd allocates manufacturing support costs for Product A and Product B on the basis of direct labour hours. It estimates that this year it will:
• incur $2,000,000 in manufacturing support costs;
• produce 40,000 units of Product A and 5,000 units of Product B; and
• incur one hour of direct labour for Product A and two hours for Product B.

Costs and selling prices for 2013 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials cost</td>
<td>$60</td>
<td>$90</td>
</tr>
<tr>
<td>Direct labour cost</td>
<td>$20</td>
<td>$40</td>
</tr>
<tr>
<td>Selling price</td>
<td>$160</td>
<td>$280</td>
</tr>
</tbody>
</table>

Required:
Calculate M Ltd’s manufacturing support cost drivers for 2013 and the cost to manufacture one Product A and one Product B. Show all workings. [3 Marks]

Part B

At a recent board meeting, concerns were expressed by several board members about the costing methodology used to cost products. As a result, the accountant of M Ltd conducted a detailed review of the manufacturing activities and costs. Based on the review, she traced support costs to four activities as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Driver</th>
<th>Product A Units</th>
<th>Product B Units</th>
<th>Cost $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase orders</td>
<td>Number of orders</td>
<td>400</td>
<td>200</td>
<td>360,000</td>
</tr>
<tr>
<td>Quality control</td>
<td>Number of quality checks</td>
<td>1,000</td>
<td>1,000</td>
<td>500,000</td>
</tr>
<tr>
<td>Product setup</td>
<td>Number of setups</td>
<td>100</td>
<td>100</td>
<td>440,000</td>
</tr>
<tr>
<td>Machine maintenance</td>
<td>Machine hours</td>
<td>15,000</td>
<td>20,000</td>
<td>700,000</td>
</tr>
</tbody>
</table>

Required:
1. Calculate the total cost to manufacture one Product A and one Product B. Show all workings. [6 Marks]

2. Using the three (3) cost drivers, explain and conclude if the old system outlined in Part A overcosts Product B in comparison to the new system outlined in Part B. [3 Marks]
QUESTION 7 [9 Marks]

The following information relates to a retail company specialising in homewares:

- Sales are expected to be $54,000 for January 2012 and $40,000 for February 2012.
- Collections are expected to be 70% in the month of sale and 30% in the month following the sale.
- The gross margin is budgeted at 30% of sales (i.e. cost of goods sold amounts to 70% of sales revenue).
- Merchandise is purchased on credit and is payable in the following month.
- Inventory purchased in January cost $37,800 and in February cost $28,000.
- Purchase equipment for $216,000 on credit in January 2012. The life of the asset is three years.
- A 12 month insurance policy for $12,000 was paid on 1 February 2012 covering 1 February 2012 to 31 January 2013.
- Other monthly expenses are budgeted at $4,520, and are paid in the month incurred.
- Ignore income tax.

**Required:**

1. Prepare a cash budget for February 2012. Show all working. [5 Marks]

2. Prepare a budgeted income statement for February 2012. Show all working. [4 Marks]
QUESTION 8 [10 Marks]

A. X Ltd’s unit selling price is $40, the unit variable costs are $25, fixed costs are $135,000, and current sales are 10,000 units. How much will profit change if sales increase by 5,000 units? [2 Marks]

B. G Ltd sells two products, A and B. Last year, G Ltd sold 20,000 units of A and 30,000 units of B. Related data are:

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit Selling Price $</th>
<th>Unit Variable Cost $</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>130</td>
<td>90</td>
</tr>
<tr>
<td>B</td>
<td>90</td>
<td>60</td>
</tr>
</tbody>
</table>

Assuming that last year’s fixed costs totalled $800,000, what was G Ltd’s break-even point in units? [2 Marks]

C. S Ltd sells product G for $150 per unit, the variable cost per unit is $105, the fixed costs are $720,000, and the tax rate is 30%. What are the sales (dollars) required to earn a net profit (after tax) of $40,000? [3 Marks]

D. The budgeted income statement for ABC for the coming year is:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>600,000</td>
</tr>
<tr>
<td>Less: Variable expenses</td>
<td><em>(400,000)</em></td>
</tr>
<tr>
<td>Contribution margin</td>
<td>200,000</td>
</tr>
<tr>
<td>Less: Fixed expenses</td>
<td>120,000</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>80,000</td>
</tr>
<tr>
<td>Less: Tax</td>
<td><em>(24,000)</em></td>
</tr>
<tr>
<td>Profit after tax</td>
<td>56,000</td>
</tr>
</tbody>
</table>

How much sales revenue must ABC generate to earn a before-tax profit of $100,000? [3 Marks]

END OF EXAM