# 5077Examination: Management I (Financial Accounting)Winter 2006/7Examiner: LuhmerThe following aids can be used:calculator, English language dictionaryThe exam consists of the 4 questions below an overleaf, all of which are to be answered.

**1. Income Statement.** Most of the sales of Paolo's mobile phone store are cash sales but he offers credit to corporate customers. Paolo owns the building in which the store is situated. It contains additional office space rented out to an advertising agency. From the following data *(amounts in €000)* prepare the store's income statement and balance sheet at end-2006. Ignore taxes.

| [A] Beginning balance sneet, at 1.   | January    | 00            |  |     |                   |
|--|------------|---------------|--|-----|-------------------|
| Fixed assets   |            |               | Owners' equity   |     |                   |
| Building, at cost  | 500        |               | Owner's capital (contributed +   |     |                   |
| less: Accumulated depreciation   | 100        |               | retained profits)  |     | 237               |
| ner Staf de Jene u. en egue Staf Staf son staf version en de sone en e  |            | 400           |  |     |                   |
| Equipment, at cost   | 110        |               | Long-term liabilities  |     |                   |
| Less: Accumulated depreciation   | <u>-50</u> |               | 8% bank loan   |     | 200               |
|  |            | 60            |  |     |                   |
|  |            | 460           | Current liabilities  |     |                   |
| Current assets   |            |               | Accounts payable, phone suppliers  | 47  |                   |
| Accounts receivable  | 12         |               | 8%, bank loan, current portion   | 50  |                   |
| Merchandise inventory  | 80         |               | Rent received in advance   | 20  |                   |
| Cash   | <u>20</u>  |               | Accrued interest payable   | 15  |                   |
|  | 2          | 112           | Other accruals (utility costs)   | _3  |                   |
|  |            |               | nan any kaominina mandratana kaokaonina aminina dia kaokao aminina 🖝 - Indonesia kaokao |     | 135               |
| Total assets   |            | 572           | Total equities   |     | <u>135</u><br>572 |
| [B] Summary of cash flows during   | 2006       |               |  |     |                   |
| Inflows  |            |               | Outflows   |     |                   |
| jong≢loatintinasi.   |            |               | Payments for:  |     |                   |
| Collections from customers:  |            |               | Merchandise (mobile phones)  | 432 |                   |
| Credit sales   | 96         |               | Salaries   | 48  |                   |
| Cash sales   | 500        |               | Utilities  | 16  |                   |
|  |            | 596           | Interest on loan   | 20  |                   |
|  |            |               | Equipment  | 30  |                   |
| Annual rent received, 1 September  |            | 33            | Loan repayment   | _50 |                   |
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|  |            | 201 201 March |  |     |                   |

In addition, the business's books disclose the following (all currency amounts are in 000):

(a) Credit sales in 2006 are one-fifth of cash sales that year.

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- (b) With regard to the extra office space, the advertising agency pays one year's rent in advance on 1 September each year. Rent was increased by 10% in 2006 from 30 to 33.
- (c) During 2006, mobile phones at a cost of 440 were purchased for resale. All purchases are on account. Inventory declined by 10 (in cost terms) between the start and end of the year.
- (d) Annual depreciation charges on the building and equipment acquired before 2006 are 20 and 12 respectively. As for the equipment purchased in 2006, Paolo records a full year's (straightline) depreciation that year. Equipment life: five years, no residual value.
- (e) Interest on the 8% bank loan is paid annually on 31 March. Paolo repays one-fifth of the loan on 31 March 2006. (Assume a 360 day year when calculating interest expense.)
- (f) The end-2006 accrual of utility costs is 2. Staff salaries earned in 2006 are paid by year-end.

## 2. Zero Bond.

Carmon Gonzalez decides to develop a new vineyard in Argentina. At the start of 2006, her company issues  $\notin 25$  million of five-year zero coupon bonds at a price (per bond) of 62. The yield to maturity is 10% (approximately) on an annual basis. The company's financial year runs to 31 December.

### Required

- (a) How much cash does the company receive in 2006? (Ignore issue costs.) What is the discount at the date of issue of the bonds?
- (b) What is the life-time cost of the bonds to the company?
- (c) What is the interest expense the company recognises in 2006 and 2009 under:
  - (i) the straight-line method of discount amortisation?
  - (ii) the interest method of discount amortisation?
- (d) How will the company report the bonds in its balance sheet at the end of 2006? At the end of 2009? Assume the company uses the interest method of discount amortisation.

## 3. Costs of sales and inventory under alternative cost flow assumptions

A distributor of yacht equipment stocks a new type of desalinator (i.e. a filtration device to make drinking water out of sea water). The following purchase quantities and prices were recorded: in April: 5 units @  $\in 2,340$  each, in May 5 units @ $\in 2,100$  each, and in June: 6 units @  $\in 2,050$  each. Sales in the respective quarter were 12 units. Costs of sales are calculated on a periodic basis at the end of the quarter.

# Required:

- (a) Compute the costs of second quarter sales and of units in inventory at end-June under FIFO, WAC, and LIFO.
- (b) Assume the company uses the WAC method. A sales representative urges the purchasing manager to purchase additional units in June at a price of €2,050. He argues that the additional units will reduce the risk of stockouts in the busy 3<sup>rd</sup> quarter and, in addition will increase second quarter's profit. Recalculate WAC cost of sales in the second quarter, assuming the company buys 10 instead of 6 units in June. Why is the cost of sales lower than in (a)? Is the company better off buying 10 units instead of 6 in June?
- (c) What if inventory at end-June is valued at replacement cost?

# 4. Bad debt

The balance sheet of a company shows the following per end 2005 (all amounts in  $\in$ ): Accounts receivable (gross): 410,000, less allowance for bad debt: (22,000), accounts receivable (net): 388,000. Credit terms are: "net 30 days". During 2006 the company makes cash sales of 1.8 million and credit sales of 3 million. It collects 2.85 million from credit customers. It writes off 30,000 of bad debts (relating to 2005 as well as to 2006 sales). At the end of 2006 an ageing analysis of receivables results in the following:

|                                   | Current | Numbers of days past due |       |     |
|-----------------------------------|---------|--------------------------|-------|-----|
|                                   |         | 1-30                     | 31-60 | >60 |
| Percentage of 2008 receivables    | 45      | 35                       | 12    | 8   |
| Percentage expected uncollectible | 0.5     | 1.5                      | 10    | 40  |

### Required:

- (a) Gross amount of receivables end-2006
- (b) allownace for bad debts (end-2006) (round to nearest 000);
- (c) Bad debt expense recognized for 2006