Foundations of Management Specialization

Accounting: Making Sound Decisions

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Quiz 3 Answers & Explanations

Understanding the Cash Flow Statement (questions 1 and 7):

1. Which of the events described below for ZRH Company is an operating activity?

    a) Purchase of a piece of equipment for CHF40,000.
    b) Borrowing CHF50,000 from a local bank, signing a long-term note payable.
    c) Payment of CHF20,000 of its outstanding accounts payable.
    d) Sale of a building used for operations for CHF500,000.

Answer: The correct answer is c). The payment to suppliers is an operating activity. The purchase of equipment and the sale of a building are investing activities, whereas borrowing from a bank is a financial activity.

2. Which of the following events is not an investing activity?

    a) The repayment of a building mortgage.
    b) The purchase of land.
    c) Payment to the equipment supplier.
    d) The purchase of marketable securities.

Answer: The correct answer is a). The repayment of a mortgage is a cash flow from financing, as we are returning a loan to the bank.

3. Which of the following statements is correct?

    a) The purchase of new machinery decreases cash from operations.
    b) The repayment of a bank loan decreases cash from investing.
    c) Cash flow from operations increases when we recognize a credit sale.
    d) A payment of dividends decreases cash from financing.

Answer: The correct answer is d). The payment of dividends is cash outflow of financing. The payment of machinery is an investing cash outflow, the repayment of a bank loan is financing cash outflow, and a credit sale does not generate cash at the moment of recognition (it will generate the cash when we collect from customers).

4. Which of the following activities would have an effect on the cash flow from financing?

   a) Purchase €20,000 of marketable securities.
   b) Payment of €100,000 in dividends.
   c) Payment of €40,000 for last year's taxes.
   d) Purchase of 10,000 shares of a listed company.

Answer: The correct answer is b). The payment of cash dividends is a financing cash outflow. The purchase of financial assets (i.e. answers a and d) are cash flows of investing activities. The payment of taxes is a cash outflow of operations.

5. The cash flow statement of Le Bernerhof SA showed, for year x2, CFO = €5,500 and CFI = -€10,200. The beginning and ending balances of the cash account in year x2's balance sheet were €7,900 and €3,200, respectively. How much cash did the company generate/consume in its financing activities?

   a) -€9,400
   b) -€4,700
   c) €0
   d) Cannot be calculated

Answer: The correct answer is c).

Change in cash = CFO + CFI + CFF

3,200 – 7,900 = 5,500 + (-10,200) + CFF → CFF = 0

6. Which of the following cash flow combinations would best describe the first months of a start-up company?

   a) CFO > 0; CFI < 0; CFF < 0
   b) CFO < 0; CFI > 0; CFF > 0
   c) CFO > 0; CFI < 0; CFF < 0
   d) CFO < 0; CFI < 0; CFF > 0

Answer: The correct answer is d). A start-up company typically incurs in many operating payments but sales are still low and so the CFO tends to be negative. The company is also investing in noncurrent assets needed for the operations, so the CFI is also negative. Obviously, the company needs cash to finance all these operational payments and investments. This normally comes from shareholders and banks, so the CFF is positive, otherwise the company goes bankrupt.

7. Which of the following activities <u>would not</u> have an effect on cash?

   a) Depreciation of office equipment.
   b) Payment of bank interest.
   c) Payment of dividends.
   d) Collections from customers.

Answer: The correct answer is a). Depreciation is an expense, but not a cash outflow. The cash outflow already took place the day we paid for the purchase of the office equipment.

Depreciation and sale of equipment (questions 8 and 9):

Downton Smith Ltd. purchased a piece of machinery on Jan 1st 2013 for €400,000. The company estimated a useful life of 10 years and a residual value of zero for this asset. On December 31st 2015, the company decided to sell the machinery for €350,000.

8. What is the accumulated depreciation of this piece of machinery on December 31, 2015 right before selling it?

   a) €80,000
   b) €120,000
   c) €280,000
   d) €320,000

Answer: The correct answer is b). The annual depreciation expense is 400,000 / 10 years = 40,000. On December 31st 2015, after three years, the accumulated depreciation is 40,000 x 3 years = 120,000.

9. What is the gain or loss on the sale of this machinery at the end of 2015?

   a) Gain of €50,000
   b) Loss of €50,000
   c) Gain of €70,000
   d) Loss of €70,000

Answer: The correct answer is c). There is a gain of €70,000 calculated as follows:

Gain (loss) on sale of asset = Selling price – Net Book Value =
= 350,000 – (400,000 – 120,000) = €70,000

Understanding how accounts relate to each other (questions 10 – 13):

The managers of Moreton, Inc. prepared the following summaries of their company's assets and liabilities (amounts are in € millions):

	31/12/**x2**	31/12/**x1**
Current assets		
Cash	140	20
A/R	50	70
Inventories	118	93
Noncurrent assets		
Equipment, net	260	300
Total assets	**568**	**483**
Liabilities		
Accounts payable	101	80
Owners' Equity		
Share capital	250	250
Retained profits	217	153
Total liabilities & OE	**568**	**483**

An analysis of the company's cash account for x2 shows three main transactions (amounts also in € millions): (1) amount received from customers: 500; (2) amount paid to suppliers for merchandise: 330; (3) amount of dividends declared and paid: 50. All sales and purchases are on credit. (*Hint*: Use T-accounts)

10. Compute sales revenues in x2:

a) 20
b) 450
c) 480
d) 520

Answer: The correct answer is c). When we account for sales revenues on credit we debit accounts receivable (A/R) and we credit the profit and loss account. Therefore, we can get sales revenues from one of these two accounts. For the A/R account we have the beginning balance and the ending balance from the balance sheet. We also have the cash collections from customers on the credit side. So we are only missing the credit sales from the debit side. We can derive credit sales as follows:
(A/R ending balance – A/R beginning balance) = Credit sales – Cash collected from customers
Credit sales = (A/R ending balance – A/R beginning balance) + Cash collected from customers
Credit sales = (50 – 70) + 500 = €480

11. Compute the purchases of inventories in x2:

    a) 21
    b) 309
    c) 310
    d) 351

Answer: The correct answer is d). When we account for purchases of inventories on credit, we debit inventories and credit accounts payable. So we should get this number from one of these two accounts. From inventories we have the beginning and ending balances, but we are missing the cost of goods sold on the credit side in addition to the purchases on the debit side. So we need to use accounts payable. For accounts payable we have the beginning and ending balance from the balance sheet, and we are also given the payments to suppliers of 330 (debit side). So we can derive the purchases on the credit side of the account as follows:
Purchases on credit = (A/P ending balance – A/P beginning balance) + Payments to suppliers =
= (101 – 80) + 330 = €351

12. Compute cost of goods sold in x2:

    a) 129
    b) 301
    c) 326
    d) 376

Answer: The correct answer is c). When we record the cost of goods sold we credit inventories and debit the profit and loss account. From inventories we have the beginning and ending balance from the balance sheet, and the purchases on the debit side that we have derived in the prior question. So we are only missing the cost of goods sold on the credit side that we can derive as follows:
COGS = Purchases – (Inventory ending balance – Inventory beginning balance) = 351 – (118 – 93) = €326

13. Compute the profit or loss for Moreton Inc. in x2:

    a) 114
    b) 66
    c) 34
    d) 84

Answer: The correct answer is a). We don´t have the profit and loss account, but we have the retained profits account where we accumulate the profits for the year. We know that the retained profits account increases with profits and decreases with dividends. We know the dividends and we also know the beginning and ending balance of retained profits. So we can derive the profit or loss for the year as follows:
Profit (loss) = (Ret. profits ending balance – Ret. profits beginning balance) + Dividends =
= (217 – 153) + 50 = €114

<u>The Cash Flow Statement direct method (questions 14 – 17)</u>:

For the remaining questions, please consider the following cash transactions that happened in the company Becker GmbH in 2015 (amounts in €000):

- Collections from customers: 500
- Purchase of equipment: 40
- Payment of dividends: 30
- Payment of taxes: 20
- Proceeds from sale of equipment: 20
- Payment to suppliers: 300
- Payment of salaries and administration expenses: 75
- Payment of prepaid rent: 5
- Acquisition of a long term loan: 90

14. Compute the cash flow from operations (CFO)?

    a) 80
    b) 100
    c) 105
    d) 120

Answer: The correct answer is b). CFO = collections from customers 500 – Payment of taxes 20 – Payment to suppliers 300 – Payment of salaries and admin. expenses 75 – Prepayment of rent 5 = €100

15. Compute the cash flow from investing activities (CFI).

    a) -60
    b) -20
    c) 20
    d) 30

Answer: The correct answer is b). CFI =Purchase of equipment -40 + Sale of equipment 20 = -€20

16. Compute the cash flow from financing activities (CFF).

    a) -120
    b) -60
    c) 40
    d) 60

Answer: The correct answer is d). CFF = Long-term loan received 90 – Payment of dividends 30 = €60)

17. How much was the total change in cash in 2015?

    a) 140
    b) 0
    c) 80
    d) 180

Answer: The correct answer is a). This is an easy question. You either add the CFO, CFI, CFF or just add all the inflows and outflows presented above.

Reviewing the Income Statement (questions 18 – 20):

Vertikal SA imports and distributes climbing gear. Its profit and loss account for the year x5 has the following items (amounts in €000):

- Debits: interest expense of 10, salaries expenses of 80, depreciation expense of 20, cost of goods sold of 150, utilities expenses of 30, rent expense of 15, and tax expense of 20.
- Credits: sales revenues of 350, and gain on sale of office equipment of 5.

The net income is 30.

18. Compute the gross margin for x5.

a) €100
b) €120
c) €205
d) €200

Answer: The correct answer is d). Gross margin = Sales – COGS = 350 – 150 = €200

19. Compute the operating profit for x5.

a) €80
b) €55
c) €60
d) €75

Answer: The correct answer is c). You can either start with the net income and add back the tax expense and interest expense (30 + 20 + 10 = €60), or take the gross margin and subtract the rest of operating expenses and add the gain on sale of equipment (Gross margin 200 – Salaries expenses 80 – utilities expenses 30 – rent expense 15 – depreciation expense 20 + gain on sale of equipment 5 = €60)

20. Compute the profit before taxes for x5.

a) €60
b) €50
c) €75
d) €55

Answer: The correct answer is b). The easiest way is to take the net income and add back the tax expense (Net income 30 + Tax expense 20 = €50).