CORRECT ANSWERS ARE HIGHLIGHTED IN RED

1. **Company A is an Italian company: it produces high-quality sweets and sells them in Europe. In the following table, you can find an extract of the 2019 financial statements of Company A that shows some selected financial data.**

Cash flow statement 2019 [k€]	
Delta NWC (final - initial)	7,500
D&A	5,000
Income taxes paid	2,300
Dividends paid	900
Interests paid	400
Cash flow from operating activities	14,000
Income statement 2019 [k€]	
Cost of sales (Cost of goods sold)	25,000
Other period expenses	3,000
General and administrative expenses	5,000

Based on the available financial data and knowing that there are no deferred taxes, which answer is correct? ***(4 Points)***

A. EBIT = 20,100 k€ ; Revenues = 53,100 k€
B. EBIT = 19,200 k€ ; Revenues = 52,200 k€
C. EBIT = 4,200 k€ ; Revenues = 37,200 k€
D. None of the above is correct

SOLUTION

EBIT is calculated starting from the cash flow statement (indirect method) as:

Cash Flow From Operating Activities	14,000 k€
- D&A	5,000 k€
+ Delta NWC (final – initial)	7,500 k€
+ income taxes paid	2,300 k€
+ interests paid	400 k€
EBIT	19,200 k€

Revenues = EBIT + Cost of sales + other period expenses + general and administrative expenses = 19,200 k€ + 25,000 k€ + 3,000 k€ + 5,000 k€ = 52,200 k€

2. **Company B produces and sells office desks. In the following table, you can find some financial and non-financial data referred to the year 2019.**

COMPANY B - DATA (2019)	
Number of office desks sold [#]	800
Selling Price [€/office desk]	250
Unitary Raw Materials cost [€/office desk]	125
Trade Receivables (final) [€]	20,000
Trade Receivables (initial) [€]	15,000
Other Operating Income [€]	1,000
Changes in Inventories of Finished Goods and WIP (f-i) [€]	500
Inventories of Raw Materials (final) [€]	900
Inventories of Raw Materials (initial) [€]	500
Trade Payables (final) [€]	50,000
Trade Payables (initial) [€]	40,000
Depreciation & Amortization (D&A) [€]	30,000
Cost of Personnel [€]	25,000
Other Operating Expenses [€]	15,000
Purchases of Raw Materials [€]	100,500
Earnings Before Taxes (EBT) [€]	21,500
Financial Expenses [€]	12,500

Based on the available data, which answer is correct? ***(4 Points)***

A. EBIT = 31.4 k€ ; NET FINANCIAL EXPENSES = 9.9 k€
B. EBIT = 45.5 k€ ; NET FINANCIAL EXPENSES = 24 k€
C. EBIT = 31.5 k€ ; NET FINANCIAL EXPENSES = 10 k€
D. None of the above is correct

SOLUTION	
Revenues	200,000.00
Other Operating Income	1,000.00
+ Changes in Inventories of Finished Goods (f-i)	500.00
Total Revenues	201,500.00
- Raw Materials used	100,100.00
- Cost of Personnel	25,000.00
- Depreciation & Amortization	30,000.00
- Other Operatng Expenses [€]	15,000.00
OPERATING PROFIT (EBIT)	**31,400.00**
- Earnings Before Taxes (EBT)	21,500.00
NET FINANCIAL EXPENSES	**9,900.00**

3. **Operating Budgets include the budget of Direct Labour. Which of the following statements concerning the Direct Labour budget is FALSE?** ***(2 Points)***

   A. The Direct Labour budget depends on the production volumes (and mix)
   B. The use of overtime impacts on the Direct Labour budget
   C. Knowledge about standard data (e.g., unitary production times) is important to draft the Direct Labour budget
   D. The number of employees working in the centralised (corporate) units is a relevant piece of information to prepare the Direct Labour budget

4. **In a manufacturing company that has no financial debts with banks, EBIT stated in the Profit and Loss Account (P&LA) by destination (or by function) is …** ***(2 Points)***

   A. More than EBIT stated in the P&LA by nature
   B. Less than EBIT stated in the P&LA by nature
   C. Equal to EBIT stated in the P&LA by nature because, being financial costs null, the Gross Margin is equal to EBITDA
   D. None of the above is correct

5. **Which statement about Discounted Cash Flows (DCF) methods is CORRECT?** ***(2 Points)***

   A. DCF methods require many assumptions for estimating cash inflows and outflows, therefore they are applicable to start-ups and early-stage companies more easily than to established companies
   B. DCF methods are characterized by poor long term orientation because they mainly rely on current data about revenues and costs
   C. DCF methods are precise because they can summarize different value drivers with one single indicator
   D. DCF methods can be used for internal accountability to a limited extent because they can hardly capture specific responsibilities of internal responsibility centres (and of their managers)

6. **Company D is a company based and active in the Eurozone developing new series for sound streaming companies. In the following table, you can find an extract of the 2019 financial statement of Company D, reporting selected financial data.**

Selected financial data [€]	**December 31st, 2019**
EBIT	30,000
Net Income	15,000
Interest expenses	7,000
Financial revenues	0
Debt	150,000
Reserves	60,000

You also know that:

- **The market value of Company D shares on 31st December 2019 is 1,1 € per share;**
- **Company D's equity is constituted by 100,000 shares (with a nominal value of 0,9 € per share);**
- **The cost of equity is 5,1%;**
- **The value of governments bonds (table below).**

Americas	**Yield**
US	2.06%
Canada	1.91%
Mexico	3.19%
Brazil	3.90%
Europe	
Germany	0.78%
Britain	1.99%
France	1.16%
Italy	2.45%

Based on the available data, which is the value of WACC for Company D? ***(4 Points)***

A. WACC is 4.06%
B. WACC is 3.8%
C. WACC is around 5%
D. WACC is 4.11%

SOLUTION
EBT = 30 – 7 = 23
Tax = 23 – 15 = 8
Tax rate = 8 / 23 = 34.78%
Equity = 60 + 15 + 0.9 * 100 = 165
D + E = 165 + 150 = 315
Kd = 7 / 150 = 4.66%
Ke = 5.1%
WACC = (150 / 315) * (1- 0.347) * 4,66 + (165 / 315) * 5.1 = 4.11

7. **With respect to the "Plan & Control" Cycle, it is TRUE that?** ***(2 Points)***

A. "Feedback" is the communication process of variance analysis to managers for supporting their decision-making
B. The "Cost-Volume-Profit" analysis is a useful approach to measure the actual results achieved by the organization or by specific organizational units
C. The Goals that inform the "Planning" phase refer typically to accounting-based ratios applied to the analysis of Financial Statements
D. None of the previous answers

8. **Company X is negotiating the sale of Company F to a potential buyer. In order to support the negotiation, it wants to estimate the Equity Value of Company F based on relative valuation. In the following table you can find a summary of 2019 key financial information of Company F:**

Selected financial data	**31st Dec 2019**
EBIT [k€]	3,900
Net cash flow [k€]	2,000
Net financial expenses [k€]	1,050
Corporate tax rate	40%
N. shares	1,000
Capital [k€]	1,000

You have also access to the following data about six companies that compete in the same industry of Company F:

	H	**I**	**J**	**K**	**L**	**M**
Price (31st Dec 2019) [€/share]	2.8	2.75	4.2	1.26	3.96	1.8
Earnings per share [€/share]	1.4	2.0	1.0	0.9	1.8	1.0
Net profit (2019) [k€]	1,400	2,400	2,000	2,800	1,800	3,000
N. shares (31st Dec 2019)	1,000	1,200	2,000	1,400	2,000	3,000
Capitalization (31st Dec 2019) [k€]	2,800	3,300	8,400	1,764	7,920	5,400
Net cash flow (2018) [k€]	1,100	950	1,000	3,600	1,300	1,200
Net cash flow (2019) [k€]	2,000	1,700	1,800	3,200	2,200	2,100
D/E ratio	2.0	1.9	2.4	4,0	1.8	3.0

Considering the available data, calculate the Equity Value of Company F ***(4 Points)***

A. The Equity value of Company F is about 9,028 k€
B. The Equity value of Company F is about 3,698 k€
C. The Equity value of Company F is about 3,958 k€
D. The Equity value of Company F is about 6,598 k€

SOLUTION

1) Company K is not comparable based on cash flow, risk and growth criteria → it must be excluded
2) Based on the other data average P/E can be computed

	H	**I**	**J**	**L**	**M**
Price (€/share)	2.8	2.75	4.2	3.96	1.8
Earnings per share (€/share)	1.4	2	1	1.8	1
Net profit [k€]	1,400	2,400	2,000	1,800	3,000
N. shares	1,000	1,200	2,000	2,000	3,000
Capitalization [k€]	2,800	3,300	8,400	7,920	5,400

Net cash flow 2018 [k€]	1,100	950	1,000	1,300	1,200	
Net cash flow 2019 [k€]	2,000	1,700	1,800	2,200	2,100	
D/E ratio	2.0	1.9	2.4	1.8	3.0	
P/E	**2**	**1.375**	**4.2**	**2.2**	**1.8**	2.315

3) Net profit F = EBIT – interest - taxes
   Net profit F = 3,900 – 1,050 – ((3,900 – 1,050) * 0.4) = 1,710
   EPS = 1,710 / 1,000 = 1.7
4) Price = Average P/E * EPS = 2,315 * 1.7 = 3,958 → E = 3,958 * 1,000 = 3,958

9. Which of the following Transfer Price methods is better to apply when dealing with enterprises that aim at encouraging integration among their business units?
(2 Points)

A. Prices based on market or cost
B. Prices negotiated within ranges
C. Pure negotiated prices
D. Dual transfer prices when there is not an external market for the selling business unit.

10. Which of the following statements concerning complete (or total) corporate cost allocation is CORRECT? ***(2 Points)***

A. Complete corporate cost allocation is the allocation method that allows to understand and measure the results of each business unit in the most complete and precise way
B. Complete corporate cost allocation is based on a detailed analysis of different corporate cost items in order to identify different cost pools within each corporate unit and identify proper allocation drivers for each cost pool
C. Complete corporate cost allocation spreads the cost of all revenue and expense centres of a company among its business units, based on proportional criteria
D. None of the above is correct

11. In Cost-Volume-Profit (CVP) analysis, when the number of units changes, which one of the following will remain the same? ***(2 Points)***

A. Contribution margin per unit
B. Total contribution margin
C. Total variable costs
D. None of the previous answers