

**ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ ΚΑΙ ΠΟΛΙΤΙΣΜΟΥ**  
**ΔΙΕΥΘΥΝΣΗ ΑΝΩΤΕΡΗΣ ΚΑΙ ΑΝΩΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ**  
**ΥΠΗΡΕΣΙΑ ΕΞΕΤΑΣΕΩΝ**

**ΠΑΓΚΥΠΡΙΕΣ ΕΞΕΤΑΣΕΙΣ 2019**

**Μάθημα: ΛΟΓΙΣΤΙΚΗ (25)**

**Ημερομηνία και ώρα εξέτασης: Πέμπτη, 23 Μαΐου 2019**

**08:00 - 11:00**

**ΤΟ ΕΞΕΤΑΣΤΙΚΟ ΔΟΚΙΜΙΟ ΑΠΟΤΕΛΕΙΤΑΙ ΑΠΟ ΕΝΤΕΚΑ (11) ΣΕΛΙΔΕΣ**

**ΟΔΗΓΙΕΣ:**

- Να απαντήσετε σε όλες τις ερωτήσεις (Answer all questions)
- Όλοι οι υπολογισμοί πρέπει να φαίνονται καθαρά στο τετράδιό σας
- Επιτρέπεται η χρήση μη προγραμματιζόμενης υπολογιστικής μηχανής
- Δεν επιτρέπεται η χρήση διορθωτικού υγρού/ταινίας
- Επισυνάπτεται τυπολόγιο Λογιστικών Αριθμοδεικτών τριών (3) σελίδων.

**QUESTION 1**  
**PART (A)**

You are in practice as an accountant and have a meeting with a client, Leona Winery, who owns a small winery business where wine is produced and sold.

The records of Leona Winery show:

1. Rent of land is €865 per year
2. Grape juice and other ingredients per bottle of wine is €1,07
3. Direct labour is €0,55 per bottle of wine
4. Water bill is €120 per month
5. Insurance for the year is €720
6. Machinery was purchased at a cost of €5.500. The machinery has a life of 8 years and a residual value of €300. Depreciation is to be charged on a straight-line basis
7. Glass and cork per bottle of wine is €0,78
8. Selling price per bottle of wine is €4,15
9. Sales are 5 500 bottles of wine per year. All production is sold.

**REQUIRED:**

**(a) Calculate**

- i. The number of bottles of wine that Leona Winery must sell **in a year**, in order to break even **(Marks 6)**
- ii. The profit that Leona Winery makes in one year **(Mark 1)**
- iii. The sales of bottles of wine that Leona Winery should make in a year in order to make a profit of €10.325 **(Mark 1)**
- iv. The margin of safety in bottles of wine **(Mark 1)**

The owners of Leona Winery were very ambitious and decided to expand their business. They therefore formed a limited company in order to take over the operations of the winery.

- (b) Να αναφέρετε δύο (2) χαρακτηριστικά μιας εταιρείας περιορισμένης ευθύνης.**  
(Give **two** characteristics of a limited company). **(Mark 1)**

**PART (B)**

Alex has been in business for many years and purchases and sells a single product. Alex uses the weighted average cost method (AVCO) for valuing his inventory and the perpetual inventory system.

The opening inventory on 1 January 2018 was valued at €900 (100 units at €9 each).

The purchases and sales during the year were as follows:

2018	Purchases	2018	Sales
January 8	120 at €10	March 9	180 at €20
February 12	100 at €11	July 14	140 at €20
June 15	100 at €13	December 23	100 at €25
August 28	180 at €14		

**REQUIRED:**

(a) Calculate the value of closing inventory, using:

- i. The weighted average cost method (AVCO), perpetual inventory system **(Marks 7)**
- ii. The 'Last in, First out' method (LIFO), periodic inventory system **(Marks 2)**

(b) Να εξηγήσετε πως οι δύο διαφορετικές μέθοδοι αποτίμησης αποθεμάτων επηρεάζουν τα κέρδη. (Η σύνταξη της κατάστασης αποτελεσμάτων χρήσης δεν είναι απαραίτητη) **(Mark 1)**

*(Explain how the two different inventory valuation methods affect the profit. Preparation of Income Statement is not required).*

**Note: Show your workings to the nearest two decimals.**

**(Total Marks 20)**

**ANSWER TO QUESTION 1**

**Part (A)**

**Workings**

<i>Per bottle of wine</i>	€	€	<i>Fixed costs (per year)</i>	€
Selling price		<b>4,15</b>	Rent of land	865
Grape juice & ingredients	1,07		Depn (5.500 - 300) : 8	650
Direct labour	0,55		Insurance	720
Glass & cork	0,78	<b>(2,4)</b>	Water bill (120 x12)	1.440
Contribution per bottle of wine		<u>1,75</u>		<u>3.675</u>

(i) Contribution per bottle of wine = *Selling price – variable costs*

$$\text{Contribution per bottle of wine} = \text{€}4,15 - \text{€}2,4 = \text{€}1,75$$

$$\text{Break even} = \frac{\text{Total fixed costs*}}{\text{Contribution per unit}} = \frac{\text{€}3.675}{\text{€}1,75} = \text{2 100 bottles of wine} \quad \text{(Marks 6)}$$

(ii) Profit for the year = (5 500 x 1,75) – 3.675 = **€5.950** (Marks 1)

(iii) No of bottles for target profit:  $\frac{\text{Fixed costs} + \text{Required profit}}{\text{Contribution per unit}} = \frac{\text{€}3.675 + \text{€}10.325}{\text{€}1,75} = \text{8 000 bottles}$  (Mark 1)

(iv) Margin of safety = 5 500 - 2 100 = **3 400 bottles** (Mark 1)  
(Κεφ. 8.2-8.4 σελ.161-166)

(b) Characteristics of a limited company (*Any Two*)

- Περιορισμένη ευθύνη (*Limited Liability*)
- Διαχωρισμός μεταξύ ιδιοκτησίας και διεύθυνσης (*ownership separate from management*)
- Διακριτή νομική οντότητα (*separate legal entity*)

(Mark 1)

(Κεφ. 4.1 σελ. 66)

**Part (B)**

**(a) (i)**

**AVCO (Perpetual Inventory System)**

Date	Details	Units	Price per unit	Balance
January 1	Opening inventory	100	9	900
January 8	Purchases	120	10	1.200
February 12	Purchases	100	11	1.100
		320	<b>10*</b>	<b>3.200</b>
March 9	Cost of Sales	(180)	10	(1.800)
		140	10	1400
June 15	Purchases	100	13	1300
		240	<b>11,25**</b>	<b>2.700</b>
July 14	Cost of Sales	(140)	11,25	(1.575)
		100	11,25	1.125
August 28	Purchases	180	14	2520
		280	<b>13,02***</b>	<b>3.645</b>
December 25	Cost of Sales	(100)	13,02	(1.302)
		<b>180</b>	<b>13,02</b>	<b>2.343,6</b>

\*3.200:320 \*\*2.700:240 \*\*\*3.645:280

(Marks 7)

**(ii) LIFO method (Periodic Inventory System)**

LIFO (Periodic): **€1.700**

(Marks 2)

**Working:**

**Units of closing inventory:**

Opening inventory	100
Purchases (120+100+100+180)	<u>500</u>
	600
Sales (180+140+100)	(420)
Closing inventory	180
Therefore 100X€9= €900	
80X€10= €800	
<b>€1.700</b>	

(Κεφ. 2.4 - 2.5 σελ. 23-24, 28)

(b) Οι δύο διαφορετικοί μέθοδοι αποτίμησης του τελικού αποθέματος (LIFO, AVCO) επιδρούν στα μικτά κέρδη (Gross profit), τα οποία θα επηρεάσουν στον ίδιο βαθμό τα Καθαρά κέρδη (Net profit). Το τελικό απόθεμα με τη μέθοδο LIFO είναι **€1.700** και είναι χαμηλότερο από το τελικό απόθεμα με τη μέθοδο AVCO **€2.343,6**.

Αυτό έχει σαν αποτέλεσμα η μέθοδος LIFO να δείχνει χαμηλότερα κέρδη κατά **€643,6** (2.343,6 - 1.700) από την μέθοδο AVCO επειδή το κόστος πωλήσεων είναι μεγαλύτερο.

*(The two different inventory valuation methods affect both the Gross and the Net profit. Under the LIFO method above, the closing inventory is valued at €1.700 and under AVCO it is valued at €2.343.6. Therefore under the LIFO method both the Gross and the Net Profit will be lower by €643.6 (2.343.6 - 1.700) because it results at a higher cost of sales)*

**(Mark 1)**

(Κεφ. 2.6 σελ. 29)

**(Total Marks 20)**

## QUESTION 2

The directors of Columbus Products Ltd have provided the following extracts from the general ledger balances on 31 December 2018:

	€
Share capital (€1 ordinary shares)	4.000.000
Share premium	1.000.000
Retained earnings	1.070.000
10% bank loan	80.000
Land at cost	4.090.000
Office equipment – cost	672.000
Office equipment – accumulated depreciation	428.000
Delivery vans – cost	496.000
Delivery vans – accumulated depreciation	298.600
Trade receivables	362.600
Irrecoverable debts	20.200
Allowance for doubtful debts	17.000
Inventory at 1 January 2018	88.100
Revenue	2.696.000
Sales returns	6.000
Purchases	1.600.000
General administrative expenses	122.000
General distribution costs	74.500
Bank loan interest	4.000
Wages and salaries	121.500
Directors remuneration	56.000

### Additional information

1. On 31 December 2018 inventory was valued at €108.500. This included damaged inventory costing €18.000. This could be sold for €21.400, after repairs costing €4.800
2. On 25 July 2018 a delivery van, which cost €80.000, with accumulated depreciation of €56.000 was sold for €20.000. These transactions have not yet been accounted for

The depreciation is charged as follows:

- Office equipment: 25% per annum using the reducing (diminishing) balance method
- Delivery vans: 20% straight line method

The depreciation policy is to charge a full year's depreciation in the year of acquisition and none in the year of disposal

3. Directors' remuneration includes €26.000 of the marketing director
4. Insurance of €12.000, **included** in the general administrative expenses, had been paid for the three months ending 31 January 2019
5. The allowance for doubtful debts is to be maintained at 5% of trade receivables, after writing off a debt of €2.600, which is considered to be irrecoverable
6. The wages and salaries are distributed in the ration of 4:1 between administrative expenses and distribution costs
7. Corporation tax on profits is estimated at €125.000 and is payable on 5 June 2019.

**During the year the following transactions took place which have not yet been accounted for:**

- The land at cost was revalued upward by 10%
- On 15 December the directors decided to make a new issue of 1 000 000 shares at €1,5 in order to take advantage of a business opportunity
- On 28 December the company paid a final dividend of €0,10 per share  
All the shares were eligible for the dividend payment.

### REQUIRED:

Prepare, in line with International Accounting Standard (IAS) 1:

- i. The Statement of Profit or Loss for the year ended 31 December 2018 **(Marks 15)**
- ii. The Statement of Changes in Equity for the year ended 31 December 2018. **(Marks 5)**

**(Total Marks 20)**



**ANSWER TO QUESTION 2**

(a) (i) **Columbus Products Ltd**  
**Statement of Profit or Loss for the year ended 31 December 2018**

	€	€
Revenue (W1)		2.690.000
<b>Cost of sales (W2)</b>		(1.581.000)
Gross profit		1.109.000
<b>Administrative expenses (W3)</b>	330.000	
<b>Distribution costs (W4)</b>	212.000	(542.000)
Profit from operations		567.000
<b>Finance costs (W5)</b>		(8.000)
Profit for the year before tax		559.000
Income tax expense		(125.000)
<b>Net Profit for the year</b>		<b>434.000</b>

**(Marks 15)**

**Workings:**

<b>W1</b>	<b>€</b>
Revenue	2.696.000
Less sales returns	(6.000)
	<b>2.690.000</b>
<b>W2 Cost of sales</b>	
Opening inventory	88.100
Purchases	1.600.000
Closing inventory $108.500 - 18.000 + 16.600^*$	(107.100)
*NRV = $21.400 - 4.800$	1.581.000
<b>W3 Administrative expenses</b>	
	<b>€</b>
General Administrative expenses $122.000 - (12.000 \times 1/3)$	118.000
Irrecoverable debts $(20.200 + 2.600)$	22.800
Directors remuneration $(56.000 - 26.000)$	30.000
Wages and salaries $(121.500 \times 4/5)$	97.200
Allowance for doubtful debts adjustment $(17.000 - 18.000^*)$	1.000
Depreciation on office equipment $(672.000 - 428.000) \times 25\%$	61.000
* $(362.600 - 2.600) \times 5\%$	<b>330.000</b>

<b>W4 Distribution costs</b>	<b>€</b>
General Distribution costs	74.500
Wages and salaries $(121.500 \times 1/5)$	24.300
Marketing director remuneration	26.000
Loss on delivery van $20.000 - (80.000 - 56.000)$	4.000
Depreciation on delivery vans $(496.000 - 80.000) \times 20\%$	83.200
<b>W5</b>	<b>212.000</b>
<b>Finance cost</b>	
$80.000 \times 10\%$	8.000

(ii) **Statement of Changes in Equity for the year ended 31 December 2018T**

	Share Capital €	Share Premium €	Revaluation Reserve	Retained Earnings €	Total €
Balance at start	4.000.000	1.000.000		1.070.000	6.070.000
Issue of shares	1.000.000	500.000			1.500.000
Land Revaluation			409.000		409.000
Profit for the year				434.000	434.000
Dividends paid				(500.000)	(500.000)
Balance at end	5.000.000	1.500.000	409.000	1.004.000	7.913.000

**(Marks 5)**

Workings

<b>1. Issue of shares</b>	€	€
Dr Bank (1 000 000x€1,5)	1.500.000	
Cr OSC (1 000 000x€1)		1.000.000
Cr Share Premium (1 000 000x€0,5)		500.000
<b>2. Land revaluation</b>		
Dr Land (4.090.000x10%)	409.000	
Cr Revaluation Reserve		409.000
<b>3. Dividend paid: 5 000 000 sharesx€0,1 = €500.000</b>		

(Κεφ. 5.2-5.3, σελ.88-89)

**(Total Marks 20)**

**QUESTION 3**

Amalthia Plc Statement of Profit or Loss (extract) for the year ended 31 December 2018 is given below:

	<b>€000</b>
Gross profit	212
Operating expenses	(132)
Operating profit	80
Finance cost	(10)
Profit before tax	70
Taxation	(20)
Profit after tax	50

**The Statements of Financial Position of Amalthia Plc as at 31 December 2018 and 2017 were as follows:**

	<b>2018</b>		<b>2017</b>	
	€000	€000	€000	€000
<b>Non-current assets</b>				
Property, plant and equipment at cost		1.550		1.500
Accumulated depreciation		(300)		(250)
Property, plant and equipment at NBV		<u>1.250</u>		<u>1.250</u>
<b>Current assets</b>				
Inventory	14		10	
Trade receivables	36		30	
Bank	40	90	45	85
Total Assets		<u>1.340</u>		<u>1.335</u>
<b>Equity &amp; Liabilities</b>				
Share Capital		1.110		980
Share Premium		50		30
Retained earnings		80		40
		<u>1.240</u>		<u>1.050</u>
<b>Non-current liabilities</b>				
9% Loan Notes		50		200
<b>Current liabilities</b>				
Trade payables	10		5	
Taxation	40	50	80	85
		<u>1.340</u>		<u>1.335</u>

**Notes:**

- i. The depreciation of non-current assets for the year was €80.000
- ii. Loss on sale of a non-current assets was €8.000
- iii. Dividends paid during the year were €10.000
- iv. New non-current assets were purchased during the year at a cost of €100.000.

**REQUIRED:**

**(a)** Prepare for the year ended 31 December 2018 the:

- i. Property, Plant and Equipment Account **(Marks 2)**
- ii. Accumulated depreciation of Property, Plant and Equipment Account **(Marks 2)**
- iii. Disposal Account **(Marks 2)**

**(b)** The Statement of Cash Flows in accordance with International Accounting Standard (IAS) 7

**(Marks 14)**

**(Total Marks 20)**

**ANSWER TO QUESTION 3**

(a)

(i) PROPERTY, PLANT AND EQUIPMENT–COST A/C

	€000		€000
Balance b/d	1.500	<b>Disposal</b>	<b>50</b>
Bank	100	Balance c/d	1.550
	1.600		1.600

**(Marks 2)**

(ii) ACCUMULATED DEPRECIATION A/C

	€000		€000
<b>Depreciation - disposal</b>	<b>30</b>	Balance b/d	250
Balance c/d	300	SOPL- charge for the year	80
	330		330

**(Marks 2)**

(iii) DISPOSAL A/C

	€000		€000
PPE at cost	50	Accumulated Depn (w3)	30
		<b>Bank-proceeds</b>	<b>12</b>
		Loss on disposal	8
	<u>50</u>		<u>50</u>

(Marks 2)

(b)

**Amalthia plc**  
**STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2018**

	€000	€000
<b>Cash flows from operating activities</b>		
Profit before taxation	70	
Add: Loss on sale of machinery	8	
Add: Depreciation	80	
Add: Finance cost	<u>10</u>	
<b>Operating cash flows before working capital changes</b>	<b>168</b>	
Less: Increase in trade and other receivables	(6)	
Less: Increase in inventories	(4)	
Add: Increase in trade payables	<u>5</u>	
<b>Cash flows generated from operations</b>	<b>163</b>	
Interest paid	(10)	
Income tax paid (W1)	<u>(60)</u>	
<b>Net cash flows from operating activities</b>		<b>93</b>
<b>Cash flows from investing activities</b>		
Purchase of non-current asset (W2)	(100)	
Proceeds from sale of non-current asset (W4)	<u>12</u>	
<b>Net cash flows used in investing activities</b>		<b>(88)</b>
<b>Cash flows from financing activities</b>		
Proceeds from issue of share capital (980+30-1,110-50)	150	
Proceeds from long-term borrowings (200-50)	(150)	
Dividends paid	<u>(10)</u>	
<b>Net cash flows used in financing activities</b>		<b>(10)</b>
<b>Net Decrease in cash and cash equivalents</b>		<b>(5)</b>
Cash and cash equivalents at beginning of period		45
Cash and cash equivalents at end of period		<u>40</u>
<b>Net Decrease in cash and cash equivalents</b>		<b>(5)</b>

(Κεφ. 6.3-6.6 σελ. 112-116)

(Marks 14)

**Workings**

CORPORATION TAX A/C

	€000		€000
<b>Bank - paid</b>	<b>60</b>	Balance b/d	80
Balance c/d	40	SOPL- charge for the year	20
	<u>100</u>		<u>100</u>

**(Total Marks 20)**



**QUESTION 4**

The managers of Fresco Ice cream Company wish to purchase a new machine to replace an old machine that has become too expensive to repair. There are two machines which are capable of producing the quality of the ice cream they desire.

The following information is available for the two machines:

Year		Machine F	Machine G
0	Initial cost of investment	10.000	10.000
	Estimated net cash flows:		
1		4.500	3.500
2		2.500	3.500
3		2.500	4.000
4		2.500	2.500
5		1.000	1.500
5	Proceeds from scrap value of machine	1.500	2.000

**REQUIRED:****(a)**

- i. Calculate the exact payback period in years and months for each project **(Marks 4)**
- ii. Calculate the Average Rate of Return (ARR) for each project **(Marks 10)**

**(b)** Να συμβουλευσετε τους διευθυντές ποια μηχανή πρέπει να αγοράσουν.

Να δικαιολογήσετε την απάντησή σας.

*(Advice the managers of Fresco Ice cream Company which machine they should purchase. Give reasons for your answer).*

**(Marks 3)****(c)** The managers of Fresco's Ice cream Company are concerned about the level of borrowing. Fresco Ice cream Company financed its operations as follows:

- €0,50 Ordinary shares €500.000
- €1 Redeemable Preference shares €600.000
- 9% Bank Loan €900.000

**REQUIRED:**

- i. Calculate the gearing ratio **(Marks 2)**
- ii. Comment on the level of Fresco's Ice cream Company gearing. **(Marks 1)**

**(Total Marks 20)**

**ANSWER TO QUESTION 4**

**(α) (i) PAYBACK:**

**Machine F**

year	Cash flows €	Cumulative cash flows
0	(10.000)	(10.000)
1	4.500	(5.500)
2	2.500	(3.000)
3	2.500	(500)
4	2.500	2.500

The Payback period of machine F is **3 years and 2,4\* months**  
 $500/2.500 \times 12 = 2,4$  months

**Machine G**

year	Cash flows €	Cumulative cash flows)
0	(10.000)	(10.000)
1	3.500	(6.500)
2	3.500	(3.000)
3	4.000	1.000
4	2.500	3.500

The Payback period of machine G is **2 years and 9 \*months**  
 $3.000/4.000 \times 12 = 9$  months

**(Marks 4)**

**(ii) Average Rate of Return (ARR)**

Year	Machine F			Machine G		
	Cash flows	Depn*	Net Profit	Cash flows	Depn**	Net Profit
	€	€	€	€	€	€
1	4.500	1.700	2.800	3.500	1.600	1.900
2	2.500	1.700	800	3.500	1.600	1.900
3	2.500	1.700	800	4.000	1.600	2.400
4	2.500	1.700	800	2.500	1.600	900
5	1.000	1.700	(700)	1.500	1.600	(100)
			4.500			7.000
		Average profit	4.500/5=900		Average profit	7.000/5=1.400

\*10.000-1.500=8.500/5=1.700 per year

\*\*10.000-2.000=8.000/5=1.600 per year

**Machine F** ARR=Average net profit /initial capital  
ARR= 900x100/10.000=9%

**Machine G** ARR=Average net profit /initial capital  
ARR= 1.400x100/10.000=14%

**(Marks 10)**

**(b)** The managers of Fresco Ice cream Company **should purchase machine G** because it has the:

- ✓ **Shortest Payback period**
- ✓ **Higher ARR than machine F**

(Κεφ.9.3, 9.4 σελ.177-180)

**(Marks 3)**

**(c) Calculation of Gearing:**

$$\text{Gearing ratio} = \frac{\text{€}900.000 + \text{€}600.000}{\text{€}900.000 + \text{€}600.000 + \text{€}500.000} = \underline{75\%}$$

**(Marks 2)**

Η εταιρεία έχει **75%**, δείκτη δανειακής επιβάρυνσης που **θεωρείται ψηλό** αφού είναι ένδειξη ότι αυτή χρηματοδοτείται κυρίως από ξένα κεφάλαια, **εξαρτάται από δάνεια** και **περικλείει κινδύνους** σε περίπτωση μη αποπληρωμής τους.

*(The company is highly geared. It is mainly financed by external sources and is therefore at high risk)*

(Κεφ.7.7, σελ.145-146)

**(Mark 1)**

**(Total Marks 20)**

**QUESTION 5****PART (A)**

Plexi Ltd manufactures parts for sewing machines. It also purchases some parts for resale. The following information is available:

	<b>1 January 2018</b>	<b>31 December 2018</b>
Inventory:	€	€
raw materials	31.000	31.400
work in progress	8.500	7.550
finished goods	8.140	8.250

Some of the balances for the year ended 31 December 2018 were as follows:

	€
Sales of finished goods	461.000
Purchases of raw materials	179.100
Purchases of finished goods	30.850
Carriage on raw materials	1.200
Carriage on finished goods	200
Light and heat	4.900
Factory supervisor's salary	14.000
Patents and royalties	6.500
Administrative and sales wages	52.000
Depreciation of factory machinery	11.400
Depreciation of office equipment	6.200
Manufacturing wages	79.500
Rent	8.000

**Additional Information**

- At 31 December 2018 prepaid Light and heat was €800 and accrued Rent was €900
- Rent, Light and heat are apportioned 60% to the factory and 40% to administration
- Manufacturing wages accrued amount to €500. Six-eighths (6/8) of manufacturing wages are direct and two-eighths (2/8) are indirect.

**REQUIRED:**

Prepare the:

(a) Manufacturing Account the year ended 31 December 2018 **(Marks 7)**

(b) Income Statement (Trading Section) for the year ended 31 December 2018. **(Marks 3)**

**PART (B)**

Merfis Home Deco Ltd buys and sells home furniture. The following information relates to the last two financial years ended 30 April 2018 and 30 April 2019:

**Statement of Profit or Loss for the year ended**

	<b>30 April 2019</b>	<b>30 April 2018</b>
	<b>€</b>	<b>€</b>
Revenue	800.000	850.000
Cost of sales	(520.000)	(400.000)
Gross profit	280.000	450.000
<b>Less</b>		
General expenses	(160.000)	(300.000)
Depreciation	(40.000)	(35.000)
Loan interest	(22.000)	(24.000)
Profit for the year	58.000	91.000

**Note:** 90% of revenues for both years were on credit

**Statement of Financial Position as at**

	30 April 2019	30 April 2018
	€	€
<b>Non-current assets</b>		
Cost	200.000	150.000
Accumulated depreciation	(120.000)	(90.000)
	80.000	60.000
<b>Current assets</b>		
Inventory	105.000	60.000
Trade receivables	135.000	75.000
Cash and bank	-	65.000
	320.000	260.000
<b>Equity and Liabilities</b>		
Ordinary Share Capital	40.000	40.000
Retained earnings	10.000	19.000
<b>Non-current liabilities</b>		
8% Loan	150.000	120.000
<b>Current liabilities</b>		
Trade payables	70.000	81.000
Bank overdraft	50.000	-
	320.000	260.000

**REQUIRED:**

(a) Calculate the following ratios, in two decimal places, for **both** the years ended 30 April 2018 **and** 30 April 2019:

- i. Gross profit margin (Marks 2)
- ii. Return on **total** capital employed (ROCE) (Marks 2)
- iii. Trade receivables collection period (in days) (Marks 2)

(b) Να αναφέρετε:

- i. Δύο (2) πιθανούς λόγους για την αλλαγή στο δείκτη μεικτού κέρδους (Marks 2)
- ii. Δύο (2) πιθανούς λόγους για τους οποίους η επιχείρηση επιδιώκει τη μείωση της περιόδου είσπραξης των χρεωστών της. (Marks 2)

(Suggest **two** possible reasons:

- i. For the change in the gross profit as a percentage of revenue
- ii. The business might wish to reduce the trade receivables collection period).

(Total marks 20)

**(GRAND TOTAL MARKS 100)**

.....THE END.....

**ANSWER TO QUESTION 5**

**PART (A)**

**(a)**

Plexi Ltd  
Manufacturing A/c for the year ended 31 December 2018

	€	€
Raw Materials:		
Opening inventory		31.000
Add Purchases	179.100	
Add Carriage Inwards	1.200	180.300
		211.300
Less Closing inventory		31.400
<b>Cost of Raw Materials used</b>		<b>179.900</b>
<b>Direct labour</b>		
Manufacturing wages (79.500+500)x6/8		60.000
<b>Direct expenses</b>		
Patents and Royalties		6.500
<b>PRIME COST</b>		<b>246.400</b>
<b>Factory Overheads</b>		
Light and heat (4.900-800)x60%	2.460	
Factory supervisor's salary	14.000	
Manufacturing wages (79.500+500)x2/8	20.000	
Rent (8.000+900)x60%	5.340	
Depreciation of factory machinery	11.400	53.200
<b>Work in Progress</b>		
Add work in progress at start	8.500	
Less work in progress at end	(7.550)	950
<b>Cost of Production</b>		<b>300.550</b>

(Κεφ.3.1- 3.4 σελ 37-43)

**(Marks 7)**

(b)

Plexi Ltd		
Income Statement for the year ended 31 December 2018		
	€	€
Sales		461.000
Less Cost of sales:		
Opening inventory of finished goods	8.140	
Purchases of finished goods	30.850	
Add carriage inwards	200	
Cost of goods manufactured	300.550	
	339.740	
Less Closing inventory of finished goods	(8.250)	(331.490)
Gross profit		129.510

(Κεφ. 3.5 σελ 44)

(Marks 3)

**PART (B)**

(a)

Formula	2019	2018
<b>i) Gross Profit Margin</b> = $\frac{\text{Gross Profit}}{\text{Sales}} \times 100$	$\frac{€280.000}{€800.000} \times 100 = 35\%$	$\frac{€450.000}{€850.000} \times 100 = 52,94\%$
<b>ii) ROCE</b> = $\frac{\text{Net Profit before interest}}{\text{Total capital employed**}} \times 100$	$\frac{€58.000 + €22.000}{€200.000} \times 100 = 40\%$	$\frac{€91.000 + €24.000}{€179.000} \times 100 = 64,25\%$
<b>iii) Receivables collection days</b> = $\frac{\text{Trade receivables}}{\text{Credit Sales}} \times 365$	$\frac{€135.000}{€720.000*} \times 365 = 68,4 \text{ days}$	$\frac{€75.000}{€765.000} \times 365 = 35,78 \text{ days}$

(Marks 6)

\*2018 credit sales: 850.000x90%= 765.000

2019 credit sales: 800.000x90%= 720.000

\*\*2018 Total CE: 40.000+19.000+120.000= 179.000

2019 Total CE: 40.000+10.000+150.000= 200.000



(b) (i) Το ποσοστό Μεικτού κέρδους έχει μειωθεί κατά 17,94% δηλαδή από 52,94% το 2018 σε 35% το 2019. Αυτή η μείωση μπορεί να οφείλεται σε διάφορους παράγοντες όπως:

- Στην **αύξηση της τιμής αγοράς** που δεν επιβαρύνει τους πελάτες
- Στην αγορά προϊόντων από **άλλο προμηθευτή σε ψηλότερη τιμή**
- Στη **μείωση της τιμής πώλησης**

*(The gross profit margin was reduced by 17,94% from 52,94% in 2018 to 35% in 2019)*

*Some of the reasons for this reduction could be:*

- *An increase in the purchase price not been passed on to customers*
- *The purchase of goods from a different supplier at a higher price*
- *A decrease in the selling price*

**(Marks 2)**

(ii) Όσο πιο μικρή είναι η περίοδος είσπραξης των χρεωστών, τόσο καλύτερο είναι για την επιχείρηση επειδή:

- Η επιχείρηση θα εισπράξει τις απαιτήσεις της σε σύντομο χρονικό διάστημα και αυτό θα έχει θετική επίδραση πάνω στις ταμειακές της ροές
- Μειώνει την πιθανότητα για επισφαλείς απαιτήσεις

*(The shorter the Trade Receivables collection period the better for the company because:*

- *It will have a positive effect on its cash flow*
- *It will reduce the risk of irrecoverable debts)*

**(Marks 2)**

*(Κεφ.7.4- 7.6 σελ 138-144)*

**(Total Marks 20)**

**(GRAND TOTAL MARKS 100)**