

**ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ, ΠΟΛΙΤΙΣΜΟΥ, ΑΘΛΗΤΙΣΜΟΥ ΚΑΙ ΝΕΟΛΑΙΑΣ
ΔΙΕΥΘΥΝΣΗ ΜΕΣΗΣ ΕΚΠΑΙΔΕΥΣΗΣ**

ΕΝΙΑΙΑ ΓΡΑΠΤΗ ΑΞΙΟΛΟΓΗΣΗ Β΄ ΤΕΤΡΑΜΗΝΟΥ 2021-22

Γ΄ ΤΑΞΗΣ ΛΥΚΕΙΟΥ

ΗΜΕΡΟΜΗΝΙΑ: ΔΕΥΤΕΡΑ 23 ΜΑΪΟΥ 2022

ΕΞΕΤΑΖΟΜΕΝΟ ΜΑΘΗΜΑ: ΛΟΓΙΣΤΙΚΗ (Α΄ ΣΕΙΡΑ)

ΚΩΔΙΚΟΣ ΜΑΘΗΜΑΤΟΣ: Γ025

ΠΡΟΤΕΙΝΟΜΕΝΕΣ ΛΥΣΕΙΣ

ΔΕΚΑ (10) ΣΕΛΙΔΕΣ

ΕΝΤΥΠΟ ΚΑΤΑΧΩΡΗΣΗΣ ΒΑΘΜΟΛΟΓΙΑΣ			ΛΟΓΙΣΤΙΚΗ Γ (Γ025)				23/5/2022						
Question			Marks	1	2	3	4	5	6	7	8	9	10
1	(a) i.	Break-even point in units	10										
	(a) ii	Break-even point in €	2										
	(b)	Margin of safety	2										
	(c)	Profit or Loss	4										
	(d)	Achieve targeted profit	3										
	(e)	Profit or loss if 15 500	4										
TOTAL QUESTION 1			25										
2	(a) i.	ARR	8										
	(a) ii.	NPV	9										
	(a) iii.	Payback period	6										
	(b)	Theory	2										
TOTAL QUESTION 2			25										
3	(a) i.	Mark up	5										
	(a) ii.	Net profit margin	3										
	(a) iii.	ROCE	5										
	(a) iv.	Current ratio	3										
	(a) v.	Collection period	3										
	(a) vi.	Payment period	3										
	(b)	Theory	3										
TOTAL QUESTION 3			25										
4	(a) i.	PPE a/c	2										
	(a) ii.	Accumulated depreciation a/c	2										
	(a) iii.	Disposal a/c	2										
	(b)	Statement of Cash Flows	17										
	(c)	Multiple choice	2										
TOTAL QUESTION 4			25										
GRANT TOTAL			100										

ΠΡΟΣΟΧΗ ΣΤΑ ΣΥΝΕΠΑΓΟΜΕΝΑ ΛΑΘΗ!!!

QUESTION 1 - ANSWER

Workings

Per pancake	€	€	Fixed costs (per year)	€
Selling price		3,60	Rent (520x 12)	6.240
Raw materials	0,75		Depn [(1.500: 5) x 2	600
Direct labour	0,30		Electricity	1.980
Packaging cost	0,05	(1,10)	Other fixed costs	<u>6.600</u>
Contribution per pancake		<u>of 2,50</u>		<u>15.420</u>

(a)

i. Breakeven point (in units) = $\frac{\text{Fixed Costs}}{\text{Contribution per unit}}$

Break even (in units) = $\frac{€15.420}{€2,50} = 6\ 168\ o/f\ \text{pancakes or units}$

10 M

ii. Break Even Point in Revenue € = Break Even Point in units x selling price

= 6.168 pancakes of x €3,60 = **€22.204,80**

2 M

(b) Margin of safety = 12 200 – 6 168 = 6 032 pancakes or units

2 M

(c) Profit or loss

Sales (12.200x 3,6)	43.920
Less Variable cost (12 200 x €1,1 o/f)	(13.420) o/f
Less Fixed cost	(15.420) o/f
Profit for the year	o/f 15.080 if correct

OR Profit or Loss for the year = Total contribution – total fixed costs

Profit for the year = (12.200x €2,50) – 15.420 = o/f 15.080 if correct

OR Profit or Loss for the year = margin of safety x contribution

Profit for the year = 6.032 x €2,50 = o/f 15.080 if correct

Full marks should be awarded for any other calculation giving the correct answer

4 M

(d) Sales volume (in units) for target profit : $\frac{\text{Fixed costs} + \text{Required profit}}{\text{Contribution per unit}}$

$$\text{Number of pancakes for profit } \underline{\underline{\text{€10.500}}} = \frac{15.420 + \text{€10.500}}{\text{€2,50}} = 10.368 \text{ pancakes or units}$$

3 M

(e) Profit or loss if 5.500 pancakes were sold

Sales (5.500x €3,60)	19.800
Less Variable cost (5.500 x €1,1o/f)	(6.050)
Less Fixed cost	(15.420) o/f
Loss for the year	(1.670)o/f

4 M

OR Profit or Loss for the year = Total contribution – total fixed costs

$$= (5\,500 \times 2,50) - 15.420 = 1.670 \text{ Loss}$$

OR Profit or Loss for the year = margin of safety x contribution

$$= (5\,500 - 6\,168) \times \text{€2,50} = 1.670 \text{ Loss}$$

Full marks should be awarded for any other calculation giving the correct answer.

Total Marks 25

ANSWER 2

(a)

i. Accounting rate of return

$$\text{Μέση απόδοση (ARR)} = \frac{\text{Μέσα ετήσια μελλοντικά καθαρά κέρδη (Annual Average Profits *)}}{\text{Αρχικό κόστος επένδυσης (Initial cost of investment)}}$$

$$\text{ARR} = \frac{8.000 \text{ o/f}}{80.000 \text{ o/f}} \times 100 = 10\% \text{ ή } 0,10 \text{ of if correct}$$

Annual profits	<i>*Profits = Cash flows - Depreciation</i>
Year 1	24.000 - 14.000 = 10.000
Year 2	23.000 - 14.000 = 9.000
Year 3	23.000 - 14.000 = 9.000
Year 4	20.000 - 14.000 = 6.000
Year 5	20.000 - 14.000 = <u>6.000</u>
Total	40.000
Average	(40.000/5) if correct = 8.000o/f

Workings:

$$\text{Depreciation per year} = \frac{(\text{€}80.000 - \text{€}10.000)}{5} = \text{€}14.000 \text{ o/f}$$

8 M

ii.

Year	Net Cash flow	8%	Present Value
	€		€
0	(80.000)	1,000	(80.000) x 1,000 = (80.000)
1	24.000	0,926	24.000 x 0,926 = 22.224
2	23.000	0,857	23.000 x 0,857 = 19.711
3	23.000	0,794	23.000 x 0,794 = 18.262
4	20.000	0,735	20.000 x 0,735 = 14.700
5	20.000	0,681	20.000 x 0,681 = 13.620
5 (scrap)	10.000	0,681	10.000 x 0,681 = 6.810
NPV			15.327

9 M

iii.

	Estimated Cash flows €	Cumulative Cash flows €
Year 0	(80.000)	(80.000)
1	24.000	(80.000) + 24.000 = (56.000)
2	23.000	(56.000) + 23.000 = (33.000)
3	23.000	(10.000)
4	20.000	10.000
5	20.000	30.000
	Payback period: 3 years + 10.000/20.000 x 12 = 3 years and 6 months	

6 M

Or

$$80.000 - (24.000 + 23.000 + 23.000) = 10.000$$

$$(10.000 / 20.000) \times 12 = 6 \text{ months}$$

Payback period: **3 years and 6 months**

(b) Από οικονομικής πλευράς η Acropolis Fast Foods plc θα μπορούσε να επενδύσει στο νέο μηχάνημα επειδή δίνει θετική Καθαρή Παρούσα Αξία (ή επειδή το ARR είναι ψηλότερο από το κόστος κεφαλαίου ή επειδή η περίοδος επανείσπραξης είναι σχετικά σύντομη).

On financial grounds Acropolis Fast Foods plc should invest in the new equipment since it yields of positive NPV (or because the ARR is higher than the cost of capital or because the payback period is considered relatively quick).

2 M

Total Marks 25

ANSWER 3

i. Mark up = $\frac{\text{Gross Profit}}{\text{Cost of sales}} \times 100 = \dots\%$

$$\text{Mark up} = \frac{1.050^{**}}{2.500^*} \times 100 = 42\%$$

*Cost of Sales = $440 + 2.680 - 620 = 2.500$

** Gross profit = $3.550 - 2.500 = 1.050$

5 M

ii. Net Profit margin = $\frac{\text{Operating Profit}}{\text{Revenue}} \times 100 = \%$

$$\text{Net Profit margin} = \frac{1.050 - 320}{3.550} \times 100 = 20,56\%$$

3 M

iii. ROCE = $\frac{\text{Net profit before interest \& taxes}}{\text{Total Capital Employed}} \times 100$

$$\text{ROCE} = \frac{1.050 - 320}{2.200 + 600 + 650 + 1.000 + 800} \times 100 = 13,90\%$$

5 M

iv. Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$

$$\text{Current Ratio} = \frac{620 + 720 + 180}{400 + 620 + 160} = 1,29: 1$$

3 M

v. Average collection period = $\frac{\text{Trade receivables}}{\text{Credit sales}} \times 365 \text{ days} = ? \text{ days}$

$$\text{Average collection period} = \frac{720}{3.550} \times 365 \text{ days} = 74 \text{ days}$$

3 M

vi. Average payment period = $\frac{\text{Trade payables}}{\text{Credit purchases}} \times 365 \text{ days} = ? \text{ days}$

$$\text{Average payment period} = \frac{620}{2.680} \times 365 \text{ days} = 84,44 \text{ days}$$

3 M

(b) Οι χρεώστες/πελάτες χρειάζονται 14 επιπλέον μέρες (74-60) για να εξοφλήσουν τις υποχρεώσεις τους σε σχέση με τους όρους πληρωμής.

Αυτό έχει αρνητική επίδραση πάνω στις ταμειακές ροές/ρευστότητα της επιχείρησης.

Επίσης, αυτός θα μπορούσε να είναι και ο λόγος για τον οποίο η επιχείρηση χρειάζεται επιπλέον 14 μέρες (84-70) για να εξοφλήσει τους πιστωτές/προμηθευτές της (ή δεν μπορεί να πληρώσει εγκαίρως τις υποχρεώσεις της).

Επιπλέον, όταν οι χρεώστες δεν πληρώνουν έγκαιρα αυξάνεται ο κίνδυνος να δημιουργηθούν απώλειες από χρεώστες.

Επίσης, εάν η επιχείρηση συνεχίσει να πληρώνει τους πιστωτές/προμηθευτές της καθυστερημένα, υπάρχει ο κίνδυνος να αποσύρουν τις πιστωτικές τους διευκολύνσεις.

Trade receivables take 14 days longer (74-60) to pay compared to the agreed terms.

This could have a negative impact on the cash flows/liquidity of the business.

This could be the reason why the business can't pay its trade payables on time, (it takes 14 days longer (84-70) to repay).

If the business continues to delay payments, then the trade payables/suppliers could have their orders withheld and therefore, the business reputation could be at stake.

3 M

Total Marks 25

ANSWER 4

(a)

i. Property, plant and equipment A/c

	€		€
Balance b/d	1.500.000	Disposal	500.000
Bank	1.000.000	Balance c/d	2.000.000
	2.500.000		2.500.000

2 M

ii. Accumulated depreciation A/c

	€		€
Disposal	100.000	Balance b/d	300.000
Balance c/d	400.000	Depreciation - Profit or Loss	200.000
	500.000		500.000

2 M

iii. Disposal A/c

	€		€
PPE at cost of	500.000	Accumulated Depn of	100.000
		Bank-proceeds	350.000
		Loss on disposal	50.000
	500.000		500.000

2 M

(b)

Sonia Plc

Statement of Cash Flow for the year ended 31 December 2021

CASH FLOWS FROM OPERATING ACTIVITIES	€	€
Profit before tax	400.000	
Add: Finance cost (W2) of	29.550	
Add: Depreciation charge	200.000	
Add: Loss on disposal of non-current assets	50.000	
Operating cash flow before working capital changes	679.550	
Less: Increase in inventories	(50.000)	
Add: Decrease in trade receivables	20.000	
Add: Increase in trade payables	35.000	
Cash generated from operations	684.550	
Less interest paid (W2) of	(29.550)	
Less tax paid (W1) or (15 +50-20) of	(45.000)	
Net Cash flow from operating Activities		610.000of
CASH FLOW FROM INVESTING ACTIVITIES		
Payments to acquire non-current assets	(1.000.000)	
Proceeds from sale of non-current assets of	350.000	
Net Cash Used in Investing Activities		(650.000)of
CASH FLOW FROM FINANCING ACTIVITIES		
Net Cash used in Financing Activities		(200.000)
Net decrease in cash and cash equivalents		(240.000)
Cash and cash equivalents at the beginning of the year		230.000
Cash and cash equivalents at the end of the year		(10.000)
Net decrease in cash and cash equivalents		(240.000)

OR

OR

Net decrease in cash and cash equivalents		(240.000)
Cash and cash equivalents at the beginning of the year		230.000
Cash and cash equivalents at the end of the year		(10.000)

Working 1:

Tax A/c

	€		€
Bank	45.000	Balance b/d	15.000
Balance c/d	20.000	Profit or Loss A/c	50.000
	65.000		65.000

Working 2:

Bank Interest	300
7% Redeemable preference share (400.000 x 7%)	28.000
5% Debenture Interest (100.000 x 5% x 3/12)	<u>1.250</u>
	29.550

17 M

(c) The correct answer is iii.

2 M

Total Marks 25

GRAND TOTAL MARKS 100

---END---