ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ, ΠΟΛΙΤΙΣΜΟΥ, ΑΘΛΗΤΙΣΜΟΥ ΚΑΙ ΝΕΟΛΑΙΑΣ
ΔΙΕΥΘΥΝΣΗ ΑΝΩΤΕΡΗΣ ΚΑΙ ΑΝΩΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
ΥΠΗΡΕΣΙΑ ΕΞΕΤΑΣΕΩΝ

ΠΑΓΚΥΠΡΙΕΣ ΕΞΕΤΑΣΕΙΣ ΠΡΟΣΒΑΣΗΣ 2022

ΜΑΘΗΜΑ: **ΛΟΓΙΣΤΙΚΗ (25)**

ΧΡΟΝΟΣ: **3 ώρες**

ΗΜΕΡΟΜΗΝΙΑ: Δευτέρα, 20 Ιουνίου 2022

ΠΡΟΤΕΙΝΟΜΕΝΕΣ ΛΥΣΕΙΣ

ΔΕΚΑ (10) ΣΕΛΙΔΕΣ

ANSWER 1
PART A

i.	c	Κεφ. 2, ενότ. 2.4, σελ. 37
ii.	b	Κεφ. 2, ενότ. 2.4, σελ. 36
iii.	a	Κεφ. 2, ενότ. 2.6, σελ. 41
iv.	d	Κεφ. 9, ενότ. 9.4, σελ. 201

8 M

PART B

a)

Variable cost per unit	€
Direct labour	16,00
Royalties	5,50
Active pharmaceutical ingredient	14,50
Delivery and shipping cost	6,20
Formulation cost	2,80
	45,00*

Contribution per unit = selling price – variable cost per unit
= €60 – €45* = €15

4 M

b)

Total Fixed cost	€
Rent of premises (100.000 x 4 quarters)	400.000
Production, administration, and marketing costs (50.000x12)	600.000
Machines depreciation [(€1.400.000-200.000) x2] : 8	300.000
Other Fixed Costs	200.000
	1.500.000*

$$\text{Break Even Point in units} = \frac{\text{Fixed Cost}}{\text{Contribution per Unit}}$$

$$= \frac{€1.500.000*}{€15} = 100\,000 \text{ units or PCR tests}$$

4 M

c) Margin of Safety in units = Sales in units – Break Even in units
= (110 000 – 100 000) = 10 000 units or PCR tests

1 M

d) Profit = Total Contribution – Fixed Cost
= [(110 000 units x €15) – €1.500.000]
= [€1.650.000 – €1.500.000] = **€150.000**

1 M

Alternative solution 1:

Profit = Total Revenue – Total Cost

= Total Revenue – Fixed Cost – Total Variable Cost

= (110 000 units x €60) – [€1.500.000 + (110 000 units x €45)]

= €6.600.000 – (€1.500.000 + €4.950.000)

= [€6.600.000 – €6.450.000]

= €150.000

Alternative solution 2:

Profit = Margin of Safety in units x contribution per unit

= [10 000 units x €15] = **€150.000**

e) $\textbf{Units required to earn } €\mathbf{600.000} \textbf{ profit} = \frac{\textbf{Fixed Cost+Required Profit}}{\textbf{Contribution per Unit}}$

$$= \frac{€\mathbf{1.500.000} \ + \ €\mathbf{600.000}}{€\mathbf{15}} = \frac{€\mathbf{2.100.000}}{€\mathbf{15}} = \mathbf{140\ 000\ units}$$

2 M

ANSWER 2

(a)

JOURNAL

Date	Details	Debit €	Credit €
2022	Bank (€800.000 / €2) x 1 / 4 x€2,20	220.000	
July 1	Ordinary Share Capital (100.000 x €2)		200.000
	Share Premium (100.000 x 0,20)		20.000
Oct. 1	Share Premium (500.000 x 1/10) x€2	100.000	
	Ordinary Share Capital		100.000
Nov. 30	Bank [(€1.200.000 / €2) - 550.000)] x €2	100.000	
	Ordinary Share Capital		100.000
Dec. 31	Retained Earnings (or Dividends)	30.000	
	Bank (600.000 x €0,05)		30.000

Alternative workings:

		Shares	€
Jan. 1	Balance at start (€800.000 / €2)	400.000	800.000
July 1	Rights Issue (400.000 x 1/4) x €2	100.000	200.000
	Total after Rights Issue	500.000	1.000.000
Oct. 1	Bonus Issue (500.000 x 1/10) x €2	50.000	100.000
	Total after Bonus Issue	550.000	1.100.000
Nov. 30	Issue of remaining shares	50.000	100.000
	(1.200.000 / €2)	600.000	1.200.000

10 M

(b) Equity section of the Statement of Financial Position of Armonia Plc:

Equity	**€**
Issued share capital: ordinary shares of €2 each	1.200.000
Share premium (90.000 + 20.000 - 100.000)	10.000
Revaluation reserve	30.000
Retained earnings (100.000-30.000)	70.000
Total Equity	1.310.000

3M

(c) Reasons for rights issue (Οποιαδήποτε δυο)

- Ενθαρρύνει τους υφιστάμενους μετόχους να εξασκήσουν τα δικαιώματά τους (ως προς την αγορά μετοχών).
- Είναι ένας οικονομικός τρόπος αύξησης κεφαλαίου.
- Έχει μεγαλύτερες πιθανότητες επιτυχίας συγκριτικά με έκδοση ανοικτή προς το κοινό.
- Είναι ένας τρόπος χρηματοδότησης / εξασφάλισης κεφαλαίου της εταιρείας.
- Encourages existing shareholders to exercise their right to buy shares.
- It is one cost-effective way to increase capital
- The rights issue is offered to existing shareholders and therefore has more chances to be successful than public offering..
- Companies most commonly issue a rights offering to raise additional capital/funding.

2 M

Κεφ. 4, ενότ. 4.8.2, σελ.90

PART B
Net Present Value

Year	**Net cash flow €**		**8%**	**Present value €**
0	(40.000.000)	x	1,00	(40.000.000)
1	18.000.000	x	0,926	16.668.000
2	16.000.000	x	0,857	13.712.000
3	12.000.000	x	0,794	9.528.000
3 (scrap)	5.000.000	x	0.794	3.970.000
	NPV			3.878.000

***Cash inflows – Cash outflows**

Year 1: 27.000.000 – 9.000.000 = 18.000.000
Year 2: 22.000.000 – 6.000.000 = 16.000.000
Year 3: 17.000.000 – 5.000.000 = 12.000.000

5 M

(Total Marks 20)

ANSWER 3

Hercules Plc **STATEMENT OF CASH FLOW FOR THE YEAR ENDED 31 DECEMBER 2021**		
	€	**€**
Cash generated from Operations	**91.400**	
Less: Interest **Paid:** Bank Overdraft	(500)	
Debentures	(3.500)	
Less: Corporation Tax **Paid** (**w1**) or (31.000 + 12.000 – 14.000)	(29.000)	
Net Cash From Operating Activities		**58.400**
Cash Flow From Investing Activities		
Payments to acquire equipment	(70.000)	
Proceeds from sale of P.P.E. (**w2**) or (85.000 – 30.000 – 16.400)	38.600	
Payments to acquire shares in other companies (40.000 – 25.000)	(15.000)	
Dividends received (investment income)	2.000	
Net Cash Used in Investing Activities		**(44.400)**
Cash Flow from Financing Activities		
Proceeds from issue of ordinary shares (250 – 180) + (33 – 12)	91.000	
Repayment of Debentures (110.000-50.000)	(60.000)	
Ordinary dividends paid	(18.000)	
Net Cash flow from Financing Activities		**13.000**
Net Increase in Cash and Cash Equivalents		**27.000**
Cash and Cash Equivalents at the beginning of the year		**(**7.000)
Cash and Cash Equivalents at the end of the year		20.000
Net Increase in Cash and Cash Equivalents		**27.000**

17 M

Alternative solution:

Net Cash flow from Financing Activities		**13.000**
Net increase in cash and cash equivalents		**27.000**
Cash and cash equivalents at the beginning of the year		**(7.000)**
Cash and cash equivalents at the end of the year		**(20.000)**

Workings

(1) Corporation Tax A/c

	€		€
Cash - paid	**29.000**	Balance b/d	31.000
Balance c/d	14.000	SOPL- charge for the year	12.000
	43.000		43.000

(2) Disposal A/c

	€		€
P.P.E.	85.000	Accumulated Dep'n	30.000
		Bank-proceeds	**38.600**
		Loss on disposal	16.400
	85.000		85.000

(b) Η ρευστότητα είναι πιο σημαντική από την κερδοφορία.

Οποιαδήποτε απάντηση από τα πιο κάτω:

- Καμία επιχείρηση δεν θα οδηγηθεί σε κλείσιμο αν κάνει ζημιές, αλλά αντιθέτως θα υποχρεωθεί σε κλείσιμο/ χρεωκοπία αν δεν είναι σε θέση να πληρώσει τους πιστωτές της.
- Η ρευστότητα είναι η ικανότητα μιας επιχείρησης να πληρώνει τις τρέχουσες υποχρεώσεις της άρα είναι πιο σημαντική από την κερδοφορία.
- Η ρευστότητα είναι το «αίμα» για την ζωή της επιχείρησης (lifeblood of the business) και από αυτήν εξαρτάται η επιβίωσή της.

Liquidity is more important than profitability.

- A business can operate at a loss, but forced into liquidation/bankruptcy if it is not able to pay its creditors.
- Liquidity measures the company's ability to pay its short-term liabilities and thus it is a more important than profitability.
- Liquidity is the lifeblood of the business and its survival depends on it.

Κεφάλαιο 6, ενότ. 6.1, σελ. 125 **3 M**

(Total Marks 20)

ANSWER 4

PART A

(a)

i. Inventory Turnover = $\frac{Cost\ of\ Sales*}{Average\ Inventory**}$ =? times

Inventory Turnover = $\frac{1.200.000*}{375.000**}$ = 3,20 times

*Cost of Sales = Opening inventory + purchases – closing inventory

= (350.000 + 1.250.000 – 400.000) if correct = 1.200.000

**Average inventory= (Opening + closing)/2 = [(350.000 + 400.000)/2] = 375.000

3 M

ii. Mark up

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

Mark up = $\frac{(1.900.000 - 1.200.000\mathbf{of})^{**}}{*1.200.000\mathbf{of}} \times 100 = 58{,}33\%$

**Gross Profit = Revenue – Cost of sales

2 M

iii. Current ratio = $\frac{Current\ Assets}{Current\ Liabilities}$

3,25 = $\frac{400.000 + Trade\ Receivables + 65.000}{180.000 + 36.000}$ =

3,25 x 216.000 = 465.000 + Trade Receivables

Trade Receivables = €237.000

4 M

(b) Οποιοδήποτε από τα πιο κάτω:

Μια ψηλή αναλογία μπορεί να υποδηλώνει:

- ότι η επιχείρηση (Thalia Plc) διαθέτει πόρους οι οποίοι δεν χρησιμοποιούνται αποδοτικά.
- υπάρχουν ψηλά επίπεδα αποθεμάτων που παραμένουν ανεκμετάλλευτα αντί να χρησιμοποιούνται για την κερδοφορία της επιχείρησης.
- υπάρχουν ψηλά επίπεδα χρεωστών που παραμένουν ανεκμετάλλευτα αντί να χρησιμοποιούνται για την κερδοφορία της επιχείρησης
- υπάρχουν ψηλά επίπεδα διαθέσιμων μετρητών που παραμένουν ανεκμετάλλευτα αντί να χρησιμοποιούνται για την κερδοφορία της επιχείρησης
- υπάρχουν ψηλά επίπεδα αποθεμάτων με κίνδυνο να καταστραφούν ή να παλαιωθούν ή να αλλοιωθούν αντί να χρησιμοποιούνται για την κερδοφορία της επιχείρησης.
- υπάρχουν ψηλά επίπεδα χρεωστών με αποτέλεσμα η επιχείρηση να κινδυνεύει να έχει μεγάλες απώλειες από χρεώστες

Any of the following:

The high current ratio of Thalia Plc may indicate that:

- the management may not be using its assets efficiently.
- the company retains high levels of inventory that remain unused instead of being used for business profitability.
- the company retains high levels of trade receivables that remain unused instead of being used for business profitability.
- the company retains high levels of available cash that remain unused instead of being used for business profitability.
- the company carries excess inventory which is inefficient and carries the risk of stock obsolense or damage.
- the company does not collect receivables on time and thus carries the risk of trade receivables becoming irrecoverable/bad.

Κεφάλαιο 7, ενότ. 7.5 , σελ. 159 **2 M**

PART B

(a)

Computer Equipment a/c

2021		**€**	**2021**		**€**
Jan 1	Balance b/d	200.000	Aug 31	Disposal	60.000
Oct 1	Payables a/c	40.000	Dec 31	Balance c/d	180.000
		240.000			**240.000**
2022			**2022**		
Jan 1	Balance b/d	180.000			

2 M

(ii)

Accumulated depreciation - Computer Equipment a/c

2021		**€**	**2021**		**€**
Mar 31	Disposal **W1**	25.000	Jan 1	Balance b/d	120.000
Dec 31	Balance c/d	142.500	Dec 31	Depreciation* **W2**	47.500
		167.500			**167.500**
2022			**2022**		
			Jan 1	Balance b/d	142.500

5 M

***Depreciation expense or Profit or Loss ledger**

(iii)

Computer Equipment – Disposal a/c

2021		**€**	**2021**		**€**
Aug 31	Disposal	60.000	Aug 31	Accumulated depn**W1**	25.000
			Aug 31	Receivables	12.500
			Dec 31	Loss on disposal*	22.500
		60.000			**60.000**

2 M

***Loss on disposal or Profit or Loss ledger**

Working 1: total depreciation of Computer Equipment sold:

$(€60.000 \text{ x } 25\%) \text{ x } \frac{20}{12} = €25.000$

Alternative working 1:

Working 1: total depreciation of Computer Equipment sold:

Depreciation for the year 2020 = 60.000 x 25% =	€15.000
Depreciation for the year 2021 = (60.000 x 25% x 8/12) =	€10.000
	€25.000

Working 2: total depn for the year 2021

(200.000 – 60.000) x 25% =	€35.000
60.000 x 25% x 8/12 =	€10.000
40.000 x 25% x 3/12 =	€2.500
	€47.500

(Total Marks 20)

ANSWER 5

Atlas Plc
Statement of Profit or Loss for the year ended 31 December 2021

	€	€
Revenue		1.284.000
Cost of sales (W1)		(801.400)
Gross profit		482.600
Administrative expenses (W2)	**of**182.375	
Distribution costs (W3)	**of**133.635	(316.010)
Profit from operations		166.590
Finance costs (W4)		(9.000)
Profit for the year before tax		157.590
Corporation tax expense		(18.790)
Net Profit for the year		138.800

6 M

Workings:

W1 Cost of sales	**€**
Opening inventory	69.800
Purchases	787.350
Carriage Inwards	39.000
Closing inventory	(94.750)
	801.400

2,5 M

W2 Administrative expenses	**€**
Irrecoverable debts (8.300+2.550)	10.850
Wages and salaries (131.250 + 11.250) x 80%	114.000
Allowance for irrecoverable debts [(98.550-2.550) x10%] – 6.900	2.700
Depreciation on office buildings (363.000 x10%)	36.300
Depreciation on equipment [(190.000 – 66.500) x 20%] x 75%	18.525
	182.375

6,5 M

W3 Distribution costs	**€**
Carriage outwards	54.560
Wages and salaries (131.250 + 11.250) x 20%	28.500
Warehouse rent [25.300 + (6.900 x 1/3)]	27.600
Depreciation on delivery vans (120.000 - 36.000) x 20%	16.800
Depreciation on equipment [(190.000 – 66.500) x 20%] x 25%	6.175
	133.635
	3,5 M
W4	
Finance cost	
(120.000 x 10%) x 9/12	9.000

1,5 M

(Total Marks 20)

(GRAND TOTAL MARKS 100)

ΤΕΛΟΣ