ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ, ΑΘΛΗΤΙΣΜΟΥ ΚΑΙ ΝΕΟΛΑΙΑΣ
ΔΙΕΥΘΥΝΣΗ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
ΥΠΗΡΕΣΙΑ ΕΞΕΤΑΣΕΩΝ

ΠΑΓΚΥΠΡΙΕΣ ΕΞΕΤΑΣΕΙΣ ΠΡΟΣΒΑΣΗΣ 2024

ΜΑΘΗΜΑ: ΛΟΓΙΣΤΙΚΗ (25)

ΗΜΕΡΟΜΗΝΙΑ ΚΑΙ ΩΡΑ: Τετάρτη, 26 Ιουνίου 2024

08:00 - 11:00

ΤΟ ΕΞΕΤΑΣΤΙΚΟ ΔΟΚΙΜΙΟ ΑΠΟΤΕΛΕΙΤΑΙ ΑΠΟ ΕΝΤΕΚΑ (11) ΣΕΛΙΔΕΣ

ΣΥΝΟΔΕΥΕΤΑΙ ΑΠΟ ΤΥΠΟΛΟΓΙΟ ΔΥΟ (2) ΣΕΛΙΔΩΝ

ΟΔΗΓΙΕΣ:

- Να απαντήσετε όλες τις ερωτήσεις στο τετράδιό σας.
- Όλοι οι υπολογισμοί πρέπει να φαίνονται καθαρά στο τετράδιό σας.
- Επιτρέπεται η χρήση μη προγραμματιζόμενης υπολογιστικής μηχανής.
- Δεν επιτρέπεται η χρήση διορθωτικού υγρού/ταινίας.

QUESTION 1 - PART A

From the questions below, choose and write in your answer book the correct answer. Only one answer is correct (for example **i - a** or **i - b** etc).

i. Net present value:

a. is equal to the initial investment of the project
b. compares project cost to the present value of future net cash flows
c. is simple because future cash flows are easy to estimate
d. ignores the time value of money

ii. Which method of investment appraisal uses profits instead of cash flows?

a. the Accounting Rate of Return (ARR)
b. the Payback Period
c. the Net Present Value
d. none of the above

iii. A company is considering undertaking a project, which has an initial outlay of €600.000. The following information is available:

- The annual net cash flows for the next 3 years are estimated to be:

Net cash flows	**€**
Year 1	200.000
Year 2	300.000
Year 3	400.000

- Assume that the cash flows arise at the end of the relevant year.
- The current cost of capital for the business is 10%. A table showing the discount factor for 10% is given below:

Year 1	0,909
Year 2	0,826
Year 3	0,751

Which of the following statement is correct?

a. the project will yield a positive NPV of €730.000 and have a payback period of 2 years and 9 months
b. the project will yield a positive NPV of €730.000 and have a payback period of 2 years and 3 months
c. the project will yield a positive NPV of €130.000 and have a payback period of 2 years and 3 months
d. the project will yield a positive NPV of €130.000 and have a payback period of 2 years and 9 months

iv. A company sells tablets for €150 each. The following information is given for the month of May 2024. The company had no opening inventory on May 1.

Date		Units	Price per unit
May 2	Purchases	20	€80
May 9	Sales	12	
May 17	Purchases	40	€96
May 22	Sales	36	

Assuming the company uses the perpetual inventory system, the **cost of goods sold** for the month of May using the LIFO inventory cost method is:

a. €4.416
b. € 960
c. €1.152
d. €4.288

(Marks 10)

QUESTION 1 - PART B

Να ταιριάξετε τις έννοιες στις πιο κάτω δύο στήλες. Να γράψετε στο τετράδιο των απαντήσεών σας **το γράμμα** και δίπλα **τον αριθμό** που δηλώνει την ορθή απάντηση (π.χ. **α – 1** ή **α – 2** κ.λπ.). Κάθε γράμμα αντιστοιχεί σε ένα μόνο αριθμό.

Στήλη Α	
α.	Κοινές μετοχές (ordinary shares)
β.	Προνομιούχες μετοχές (preference shares)
γ.	Ομόλογα (debentures)
δ.	Αποθεματικά προσόδων (revenue reserves)

Στήλη Β	
1.	Μπορούν να χρησιμοποιηθούν για την πληρωμή μερίσματος (dividend)
2.	Το μέρισμα τους δεν είναι σταθερό
3.	Έχουν απεριόριστη ευθύνη
4.	Οι κάτοχοί τους έχουν το δικαίωμα να παίρνουν πρώτοι το μέρισμά τους
5.	Είναι δανειακοί τίτλοι
6.	Είναι ο μέγιστος αριθμός μετοχών που δικαιούται η εταιρεία να εκδώσει βάση του καταστατικού της

(Μονάδες 2)

QUESTION 1 - PART C

Asomatos Ltd runs a workshop that produces and sells luxury dog beds. The following information relates to the production and sale of 2 000 dog beds. Fixed costs remain the same irrespective of the number of dog beds produced/sold.

	€
Selling price per unit	50
Variable costs per unit	30
Fixed cost	10.000

Required:

a) Calculate, for the workshop the:

- **i.** Break-even point in dog beds **(Marks 1)**
- **ii.** Number of dog beds to be sold to earn a profit of €40.000 **(Marks 1)**
- **iii.** Margin of safety in dog beds **(Marks 1)**
- **iv.** The profit or loss, if 450 dog beds were sold **(Marks 1)**
- **v.** The profit or loss, if sales revenue was €110.000 **(Marks 2)**

Show all your workings.

b) Explain the:

- **i.** Break-even point (νεκρό σημείο) **(Marks 1)**
- **ii.** Variable cost (μεταβλητό κόστος) **(Marks 1)**

(Question 1: Total marks 20)

QUESTION 2 - PART A

Karavas Production uses the First In First Out (FIFO) method for valuing inventory on a periodic basis. The following is available for the year ended 31 May 2024:

Product	**Inventory 1 June 2023**	**Purchases during the year**	**Sales during the year (units)**	**Net Realisable Value at the year end**
Standard	400 @ €10	350 @ €11 on 1 Oct. 2023 100 @ €13 on 1 Feb. 2024	700	€15 each
Super	200 @ €15	400 @ €17 on 1 Nov. 2023 150 @ €19 on 1 Jan. 2024	650	€12 each

Required:

Calculate for each type of product (Standard and Super) the closing inventory:

a) in units **(Marks 4)**
b) in value **(Marks 4)**

Show all your workings.

QUESTION 2 - PART B

Andrea Lysioti, a sole trader, is in the business of manufacturing wooden toys. The wooden toys are delivered from the factory to A. Lysioti's shop, before being sold to customers. The following were some of the balances in A. Lysioti's books on 31 December 2023:

	€
Revenue	600.000
Inventory on 1 January 2023:	
Raw materials	24.000
Work in progress	17.000
Finished goods	45.000
Factory wages	156.000
Royalties	28.000
Purchases of raw materials	140.000
Returns of raw materials	12.000
Raw materials taken for own use	1.000
Carriage inwards of raw materials	2.000
Factory general expenses	29.000
Factory insurance	9.000
Factory buildings at cost on 1 January 2023	200.000
Accumulated depreciation on buildings on 1 January 2023	40.000
Machinery at net book value on 1 January 2023	120.000
Delivery vehicle at cost on 1 January 2023	30.000
Accumulated depreciation on delivery vehicle on 1 January 2023	10.800

Additional information on 31 December 2023:

- Inventory: Raw materials €26.000
  Work in progress €15.000
  Finished goods €57.000
- Factory wages prepaid amounted to €12.000. Wages are 80% direct and 20% indirect.
- Factory insurance for the second half of the year was outstanding.
- Royalties had been paid for 32 000 units. They were due on a further 4 000 units.
- Factory buildings are depreciated over a 25-year life, using the straight-line method, with no residual value.
- Machinery is depreciated at 10% per year, using the reducing balance method.
- Delivery vehicle is depreciated at 20% per year, using the reducing balance method.

Required:

Prepare the Manufacturing account for the year ended 31 December 2023.

(Marks 12)

Show all your workings.

(Question 2: Total marks 20)

QUESTION 3 - PART A

Morphou Plc has an Authorised Share Capital of €800.000 divided into ordinary shares of €2 each. The following information is available:

- The financial year of Morphou Plc begins on 1 April of each calendar year and ends on 31 March of the next calendar year.
- On 1 April 2023, the following balances were in the books of Morphou Plc:

	€
Ordinary share Capital of €2 each	600.000
Share Premium	100.000
Retained earnings	110.000

  i. On 1 October 2023, an interim dividend of €0,06 per share was paid on all shares in issue on 1 April 2023.

  ii. On 1 December 2023, the directors decided to make a bonus issue of 1 share for every 5 shares held, by utilizing the capital reserves first.

  iii. On 1 March 2024, the company offered to the public the remaining ordinary shares at par. The issue was fully subscribed.

  iv. On 31 March 2024, the company issued €50.000 4% Debentures at par. The issue was fully subscribed.

- All payments/receipts were through the bank.
- The draft profit for the year ending 31 March 2024 was €120.000, before accounting for:
  - an irrecoverable debt of €5.000, that was decided to be written off.
  - loss on disposal of a motor vehicle €17.000. No depreciation is accounted for in the year of sale.

Required:

a) Show the journal entries to record the transactions **i – iv** above. **(Marks 6)**

b) Show the Equity section of the Statement of Financial Position of Morphou Plc as at 31 March 2024 based on the relevant information given. **(Marks 4)**

Show all your workings.

QUESTION 3 - PART B

The following balances were extracted from the books of Lefka Ltd for the year ended 31 December 2023:

	€
Inventory 1 January	45.000
Inventory 31 December	50.000
Trade receivables	90.000
Carriage inwards	6.000
Expenses including interest	144.000
Non-current liabilities	200.000
Ordinary share capital	640.000
Reserves	160.000
Purchases	714.000
Interest expense	9.000
Sales: credit	850.000
cash	50.000
Returns outwards	40.000
Income tax payable	10.125

Required:

a) Calculate, to two decimal places where necessary, for the year ended 31 December 2023 the:

i. Gross profit margin ratio **(Marks 3)**

ii. Net Profit margin ratio **(Marks 2)**

iii. Return on **total** capital employed **(Marks 2)**

Show all your workings

b) The finance director compared this year's with last year's ratios. She noticed that the Gross Profit margin ratio was the same for both years, but the Net Profit margin ratio was much lower this year. In addition, the average collection period increased significantly from 28 days in 2022 to 39 days in 2023.

Required:

i. Give one (1) reason to explain the reduction in the Net Profit margin in 2023 (Να αναφέρετε ένα (1) λόγο που επεξηγεί τη μείωση του δείκτη Καθαρού Κέρδους το 2023). **(Marks 1)**

ii. Give two (2) reasons to explain the benefit of low average collection period (Να αναφέρετε δύο (2) λόγους που η επιχείρηση επωφελείται όταν έχει χαμηλή μέση περίοδο είσπραξης).

(Marks 2)

(Question 3: Total marks 20)

QUESTION 4

Rizokarpaso Plc has provided the following **extracts** from the Statements of Financial Position at 31 December 2022 and 31 December 2023:

	31 December 2022	31 December 2023
Non-current assets	**€**	**€**
Land	250.000	348.000
Plant and machinery at cost	500.000	520.000
Accumulated depreciation on plant and machinery	(100.000)	(148.000)
Investments	-----	80.000
Shares held in other companies	-----	91.000
	650.000	**891.000**
Equity and liabilities		
Equity		
Ordinary share capital of €0,50 each	300.000	400.000
Share premium	120.000	160.000
Revaluation Reserve	-----	98.000
Retained earnings	30.000	89.000
	450.000	**747.000**
Non-current liabilities		
7% Redeemable preference shares of €1	40.000	40.000
5% Bank loan	80.000	140.000
3% Debentures	90.000	-----
	210.000	**180.000**

Additional information:

- During the year ending 31 December 2023 the following events took place:
  - Various non-current assets were purchased by cheque.
  - Land was revalued at €348.000.
  - Machinery that cost €20.000, with a carrying value of €16.000, was sold for €19.000 cash.
  - Interest received from investments was €16.000.
  - Dividends received from shares held in other company were €2.730.
- On 1 February 2023 ordinary shareholders received a final dividend for the year ended 31 December 2022 of €0,05 per share.
- On 31 May 2023 an issue of 200 000 of €0,50 ordinary shares at a premium of €0,20 per share was made.
- On 1 January 2023 the 3% debentures were redeemed and on the same date the 5% Bank loan was increased.

- On 22 July 2023 all ordinary shareholders received an interim dividend of €0,02 per share.
- Redeemable preference shareholders received their dividends in full during the year.

Required:

a) Prepare for the year ended 31 December 2023 the:

i. Plant and machinery account **(Marks 2)**

ii. Accumulated depreciation on plant and machinery account **(Marks 2)**

iii. Disposal account **(Marks 2)**

b) Prepare the **Cash Flow from Investing Activities section** of the Statement of Cash Flows, in accordance with International Accounting Standard (IAS) 7.

(Marks 4)

c) Prepare the **Cash Flow from Financing Activities section** of the Statement of Cash Flows, in accordance with International Accounting Standard (IAS) 7.

(Marks 5)

Show all your workings.

d) The «Cash Flow from Operating Activities» is the first section of the «Statement of Cash Flows». For each item listed below, write in your answer book whether it will be added, deducted or no effect in the preparation of this section. Only one answer is correct (for example **i – add** or **i – deduct** or **i – no effect** etc).

i. Increase in trade receivables

ii. Increase in other payables

iii. Tax paid

iv. Changes in cash and cash equivalents

v. Profit on disposal of equipment

vi. Amortisation expense

(Marks 3)

e) Explain what depreciation expense is and why it is added back to profit before taxation when calculating the cash flow from operations. (Να γράψετε τι είναι η απόσβεση και γιατί προστίθεται στο κέρδος πριν τη φορολογία για τον υπολογισμό των ταμειακών ροών από λειτουργικές δραστηριότητες).

(Marks 2)

(Question 4: Total marks 20)

QUESTION 5

The following balances were extracted from the books of Vatili Sunset Plc at the year ended 31 December 2023:

	€
7,5% Debentures (repayable 2026)	800.000
Debenture interest expense	60.000
Auditors' fees	6.000
Revenue	3.000.000
Irrecoverable debts	26.000
Inventory at 1 January 2023	302.550
Purchases	1.900.000
Allowance for receivables on 1 January 2023	9.000
Trade receivables	415.000
Directors' remuneration	102.000
Rent and rates expenses	144.000
Advertising expenses	12.000
Carriage outwards	33.000
Salaries and wages expenses	241.800
Dividends paid	90.000
Ordinary shares at €0,40 each	2.000.000
Share premium	200.000
Retained earnings (credit balance)	55.000
Delivery vans at cost on 1 January 2023	100.000
Office equipment at cost on 1 January 2023	80.000
Accumulated depreciation on delivery vans on 1 January 2023	36.000
Accumulated depreciation on office equipment on 1 January 2023	16.000

Additional information at 31 December 2023:

1. Inventory was valued at €325.000.
2. A debt of €5.000 became irrecoverable.
3. Allowance for receivables was to be maintained at 2,5% on all remaining trade receivables.
4. Shop staff is paid a commission of 1% on all revenue. This has not yet been entered in the books.
5. Rent and rates will be apportioned in accordance with the floor space as follows:

Shop, delivery and marketing office	7 500m^2
Administration office	2 500m^2

6. The payments for advertising are made in two equal instalments at the end of June and the end of December. The payment for December is outstanding.
7. Salaries and wages consist of the following:

	Number of staff	Annual wages/salaries per staff member
Shop, delivery and marketing wages	10	€16.900
Office staff salaries	4	€18.200

8. Depreciation is to be charged as follows:

Non-Current Assets	Method
Delivery vans	20% reducing balance
Office equipment	10% straight line

9. Corporation tax on profits was estimated at €53.575.
10. On 31 December 2023, Vatili Sunset Plc made a rights issue of 1 for every 10 ordinary shares held at par. The issue was fully subscribed.

Required:

Prepare, in line with IAS 1:

a) The Statement of Profit or Loss for the year ended 31 December 2023.

(Marks 17)

b) The Statement of Changes in Equity for the year ended 31 December 2023.

(Marks 3)

Show all your workings.

(Question 5: Total marks 20)

(GRAND TOTAL MARKS 100)

ΤΕΛΟΣ ΕΞΕΤΑΣΤΙΚΟΥ ΔΟΚΙΜΙΟΥ

ΛΟΓΙΣΤΙΚΟΙ ΑΡΙΘΜΟΔΕΙΚΤΕΣ – ACCOUNTING RATIOS

1. Δείκτες Απόδοσης (ή Κερδοφορίας) – Profitability Ratios

(i) Δείκτης Μεικτού Κέρδους προς Κόστος Πωλήσεων (Mark-up)

Δείκτης Μεικτού Κέρδους προς Κόστος Πωλήσεων= $\frac{Μεικτό\ Κέρδος}{Κόστος\ πωλήσεων} \times 100 = \cdots \%$

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

(ii) Δείκτης Μεικτού Περιθωρίου ή Μεικτού Κέρδους (Gross Profit Margin)

Δείκτης Μεικτού Κέρδους = $\frac{Μεικτό\ Κέρδος}{Πωλήσεις} \times 100 = \cdots \%$

Gross Profit margin = $\frac{Gross\ Profit}{Revenue} \times\ 100 = \cdots \%$

(iii) Δείκτης Καθαρού Περιθωρίου ή Καθαρού Κέρδους (Net Profit Margin)

Δείκτης Καθαρού Κέρδους = $\frac{Καθαρό\ λειτουργικό\ Κέρδος}{Πωλήσεις} \times 100 = \cdots \%$

Net Profit margin = $\frac{Operating\ Profit}{Revenue} \times 100 = \cdots \%$

(iv) Δείκτης Απόδοσης Απασχολούμενων - Επενδυμένων Κεφαλαίων (Return on Capital Employed-ROCE)

(a) Απόδοση Απασχολούμενων Κεφαλαίων = $\frac{Καθαρά\ Κέρδη\ \boldsymbol{πριν}\ από\ τόκους\ \&\ φόρους*}{Σύνολο\ Απασχολουμένων\ Κεφαλαίων} \text{x}100 = \cdots \%$

ROCE = $\frac{Net\ profit\ \boldsymbol{before}\ interest\&\ taxes*}{Total\ Capital\ Employed} \times 100 = \cdots \%$

**or operating profit*

(b) Απόδοση Απασχολούμενων Κεφαλαίων = $\frac{Καθαρά\ Κέρδη\ \boldsymbol{μετά}\ από\ τόκους\&\ φόρους}{Απασχολούμενα\ Κεφάλαια} \text{ x } 100 = \cdots \%$

ROCE** = $\frac{Net\ profit\ \boldsymbol{after}\ interest\ \&\ taxes}{owners'Capital\ Employed} \times 100 = \cdots \%$

** or Return on equity or Return on shareholders' funds (ROSF)

2. Δείκτες Ρευστότητας – Liquidity Ratios

(i) Δείκτης Κυκλοφοριακής (ή Γενικής) Ρευστότητας (Current Ratio)

Δείκτης Κυκλοφοριακής Ρευστότητας = $\frac{Κυκλοφοριακό\ Ενεργητικό}{Βραχυπρόθεσμες\ Υποχρεώσεις}$

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

(ii) Δείκτης Πραγματικής (ή Ειδικής) Ρευστότητας (Acid Test or Quick ratio)

Δείκτης Πραγματικής Ρευστότητας = $\frac{Κυκλοφοριακό\ Ενεργητικό - Αποθέματα}{Βραχυπρόθεσμες\ Υποχρεώσεις}$

Acid Test (or Quick ratio) = $\frac{Current\ Assets - Inventory}{Current\ Liabilities}$

3. Δείκτες Δραστηριότητας – Activity Ratios (Use of assets)

(i) Δείκτης Κυκλοφοριακής Ταχύτητας Αποθεμάτων (Inventory Turnover)

Δείκτης Κυκλοφοριακής Ταχύτητας Αποθεμάτων = $\frac{Κόστος\ Πωλήσεων}{Μέσος\ Όρος\ Αποθεμάτων*} = \cdots φορές$

Inventory Turnover = $\frac{Cost\ of\ Sales}{Average\ Inventory*}$ $= \ldots$ times

*Average inventory= (Opening+closing)/2

(ii) Μέση Περίοδος Είσπραξης (Average collection period)

Μέση περίοδος είσπραξης = $\frac{Χρεώστες}{Πωλήσεις\ με\ πίστωση} \times 365\ μέρες = \cdots μέρες$

Average collection period = $\frac{Trade\ receivables}{Credit\ sales} \times 365\ days = \cdots days$

(iii) Μέση Περίοδος Πληρωμής (Average payment period)

Μέση περίοδος πληρωμής = $\frac{Πιστωτές}{Αγορές\ με\ πίστωση} \times 365\ μέρες = \cdots μέρες$

Average payment period = $\frac{Trade\ payables}{Credit\ purchases} \times 365\ days = \cdots days$

4. Δείκτες Χρέους ή Μόχλευσης (Solvency Ratios)

(i) Δείκτης Μόχλευσης (Gearing ratio)

Δείκτης Μόχλευσης = $\frac{Κεφάλαιο\ σταθερού\ εισοδήματος*}{Σύνολο\ Απασχολουμένων\ κεφαλαίων**} \times 100 = \cdots\ \%$

Gearing ratio = $\frac{Fixed\ Return\ Funding*}{Total\ Capital\ Employed**} \times 100 = \cdots \%$

* Fixed Return Funding: Preference shares + debentures + other non-current liabilities

**Total Capital Employed: OSC + PSC + reserves + non-current liabilities
(or total assets less current liabilities)