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

ΠΑΓΚΥΠΡΙΕΣ ΕΞΕΤΑΣΕΙΣ 2021

ΜΑΘΗΜΑ:	**ΛΟΓΙΣΤΙΚΗ (25)**
ΗΜΕΡΟΜΗΝΙΑ ΚΑΙ ΩΡΑ:	**Σάββατο, 29 Μαΐου 2021**
	08:00 - 11:00

ΤΟ ΕΞΕΤΑΣΤΙΚΟ ΔΟΚΙΜΙΟ ΑΠΟΤΕΛΕΙΤΑΙ ΑΠΟ ΔΕΚΑ (10) ΣΕΛΙΔΕΣ
ΣΥΝΟΔΕΥΕΤΑΙ ΑΠΟ ΤΥΠΟΛΟΓΙΟ ΔΥΟ (2) ΣΕΛΙΔΩΝ

<u>ΟΔΗΓΙΕΣ:</u>

- Να απαντήσετε όλες τις ερωτήσεις (Answer all questions) 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

Relaxing Sofa Plc is a furniture manufacturing company based in Limassol. It also purchases some furniture for resale from Italy. The following information is available for the year ended 31 December 2020:

	€
Inventory 1/1/2020: Raw materials	36.000
Work in progress	4.500
Finished goods	12.000
Purchases of raw materials	280.500
Carriage inwards on raw materials	2.500
Sales of finished goods	780.000
Purchases of finished goods	35.000
Direct wages	147.600
Indirect wages	24.700
Royalties	5.000
Factory supervisor's salary	12.000
Rates and insurance	4.400
Electricity	8.900
Office wages and salaries	30.000
Machinery at cost	360.000
Accumulated depreciation of machinery	80.000
Office furniture at cost	130.000
Accumulated depreciation of office furniture	26.000
Carriage outwards	3.600
Returns inwards	2.000

Additional information at 31 December 2020:

1. Inventory at 31 December 2020:

	€
Raw materials	33.000
Work in progress	3.940
Finished goods	9.150

2. 20% of electricity is apportioned in the office
3. Insurance prepaid €800

4. Rates and insurance are allocated to Factory and Office on the basis of the floor space occupied by each department which is:

   Factory: 700 square meters
   Office: 300 square meters

5. Depreciation on Machinery is calculated at 25% per annum using the reducing balance method

6. On 31 July 2020 the company sold some of the office furniture for €40.000. This was bought on 1 January 2019 at a cost of €60.000. Office furniture is depreciated at the rate of 20% per annum using the straight line method, for each month of ownership.

REQUIRED:

Prepare for the year ended 31 December 2020 the:

(a) Manufacturing Account **(Marks 13)**

(b) Statement of Profit or Loss (**Trading section only**) **(Marks 4)**

(c) Disposal of Office Furniture Account **(Marks 3)**

Note: Show all your workings.

(Total Marks 20)

QUESTION 2

PART A

The Statements of Financial Position of Amex Global Trading Plc on 31 December 2019 and 31 December 2020 were as follows:

	31 Dec. 2019		31 Dec. 2020	
	€000	**€000**	**€000**	**€000**
Non-Current Assets				
Property, plant and equipment at cost	10.856		11.456	
Accumulated depreciation	(3.300)	7.556	(3.958)	7.498
Current Assets				
Inventory	1.480		1.020	
Trade receivables	1.400		966	
Cash and cash equivalents	652	3.532	490	2.476
TOTAL ASSETS		**11.088**		**9.974**
EQUITY AND LIABILITIES				
Equity				
Share capital - ordinary shares of €2 each	7.000		7.000	
Share premium	550		550	
Retained earnings	906	8.456	1.134	8.684
Non-Current Liabilities				
3% Redeemable preference shares	470		470	
6% Debentures	1.000	1.470	-	470
Current Liabilities				
Trade payables	740		680	
Tax payable	422	1.162	140	820
TOTAL EQUITY AND LIABILITIES		**11.088**		**9.974**

Additional Information:

1. Plant purchased in 2010 for €1.100.000 with depreciation to date of €700.000 was sold for €420.000 on 31 January 2020.
2. On 1 June 2020, 6% debentures of €1.000.000 were redeemed/repaid.
3. Redeemable preference shareholders received their dividends during the year.
4. Profit after interest but before tax for the year ended 31 December 2020 was €948.000.
5. The corporation tax for the year was €120.000.

REQUIRED:

Prepare for the year ended 31 December 2020 the:

(a) Accumulated depreciation of Property, plant and equipment Account.

(Marks 2)

(b) Corporation tax Account **(Marks 2)**

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

(Marks 9)

Note: Show all your workings.

PART B

Melody Musical Company purchases instrument XA-3 directly from manufacturers and sells it to small retailers as well as customers. The following transactions occurred during December 2020:

2020		**Units**	**Cost per unit €**
December 01	Opening Inventory	600	60
December 08	Sales	450	114
December 14	Purchases	900	75
December 18	Sales	850	114
December 30	Purchases	650	90

The company uses the **periodic** system in recording the inventory movements.

REQUIRED:

(a) Calculate the value of the closing inventory using Weighted Average Cost (AVCO) method.

Note: Calculations to be shown to the nearest two decimal places.

(Marks 5)

(b) **Choose and <u>write in your answer book</u> the best answer given below, using the information above. Only one answer is correct.**

The value of closing inventory under FIFO method is:

i. €54.750

ii. €73.500

iii. €64.048

iv. €63.750

(Marks 2)

(Total Marks 20)

QUESTION 3

Estia Paradise plc did not have a very successful year due to high interest payments on Loan Notes. The Equity and Liabilities section of the Statement of Financial Position of Estia Paradise plc at 1 January 2020, the start of the financial year, is shown below:

Equity and Liabilities	**€000**	**€000**
Equity		
Ordinary share capital of €1	1.500	
Revaluation reserve	420	
Share premium	450	
Retained earnings	(80)	2.290
Non-current liabilities		
6% Loan notes repayable 2022		1.100
5% Redeemable preference share capital		2.200

Note: Profit for the year was €242.000

REQUIRED:

(a) Calculate the gearing ratio as at 1 January 2020. Comment on the company's level of borrowing. **(Marks 4)**

(b) From the Equity and Liabilities section above, write one (1) Revenue Reserve and one (1) Capital Reserve.
(Από τον πιο πάνω πίνακα, να επιλέξετε και να γράψετε ένα (1) Αποθεματικό Προσόδων και ένα (1) Κεφαλαιουχικό Αποθεματικό). **(Marks 2)**

During the year, the following transactions took place:

- On January 10, the company made a 2 for 5 rights issue at €1,80. All shareholders exercised their rights.
- On January 18, the directors decided to use part of the proceeds from the issue of shares to repay the 6% Loan Notes.
- On March 1, the company made a bonus issue of shares of 1 for every 5 held by utilizing part of the share premium.
- On December 31, Property at cost €500.000 was revalued upwards by 10%.

REQUIRED:

(c) Show the journal entries to record all the above transactions. **(Marks 7)**

(d) Prepare the Statement of Changes in Equity as at 31 December 2020. **(Marks 7)**

Note: Show all your workings.

(Total Marks 20)

QUESTION 4

The following balances were extracted from the books of Zephyrus Plc at 31 December 2020:

	€	€
Allowances for receivables		6.900
Carriage inwards	39.000	
Fixtures and fittings at cost	60.000	
Fixtures and fittings accumulated depreciation		22.500
Bank loan interest	7.500	
Share premium		35.000
General reserve		70.000
Irrecoverable debts	5.300	
Land at cost	419.000	
10% Bank loan		150.000
Auditors' remuneration	30.000	
Warehouse rent	26.000	
Delivery vans at cost	90.000	
Delivery vans accumulated depreciation		36.000
Ordinary share capital: €1 shares		130.000
6% Irredeemable preference share capital		45.000
Retained earnings at 1 Jan 2020		35.000
Inventory at 1 Jan 2020	69.800	
Purchases	787.350	
Bank		7.700
Revenue		1.124.000
Trade payables		109.150
Trade receivables	98.550	
Wages and salaries	138.750	
	1.771.250	1.771.250

Additional information:

1. Inventory at 31 December 2020 was valued at €96.550. This included:
   - Damaged goods costing €7.500, which can be repaired at an additional cost of €550 and can be sold for €6.250.
   - Other damaged goods costing €10.750, which cannot be repaired and are unsaleable, can be replaced at a cost of €13.150.
2. Wages and salaries, €11.250, were outstanding. The wages and salaries are shared between administration expenses and distribution costs in the ratio of 80% and 20% respectively.
3. Bank loan interest for the second half of the year was outstanding.

4. Depreciation is to be charged as follows:

Non-current assets	Method	Apportionment
Delivery Vans	20% reducing balance	
Fixtures and Fittings	10% straight line	Administration expenses 80% Distribution costs 20%

5. A debt of €2.550 became irrecoverable.
6. Allowance for receivables is to be maintained at 10% on all remaining trade receivables.
7. Corporation tax for the year was €15.400.

REQUIRED:

Prepare the Statement of Profit or Loss for the year ended 31 December 2020 in line with International Accounting Standard (IAS) 1.

Note: Show all your workings.

(Total Marks 20)

QUESTION 5

PART A

The following summary information relates to the business of Frozen Products Plc for the two years ended 31 December 2019 and 31 December 2020:

	31 December 2019	31 December 2020
	€	**€**
Revenue	300.000	400.000
Cost of sales	200.000	240.000
Total expenses	70.000	126.000
Inventory	15.000	25.000
Trade receivables	110.000	80.000
Bank balance	70.000 Cr	55.000 Dr
Ordinary share capital	200.000	200.000
Trade payables	30.000	64.000

REQUIRED:

(a) **Copy and complete** in your answer book the following table and calculate the ratios below for the year ended 31 December 2020:

Ratio	2019	2020 Calculations
(i) Gross profit margin	**33,33%**	
(ii) Net Profit margin	**10%**	
(iii) Current ratio	**1,25:1**	
(iv) Inventory turnover	**16 times**	

Note: It is not necessary to show the formulas used.

(Marks 6)

(b) Comment and explain upon the changes of the following ratios as calculated above between the years 2019 and 2020:
(Να σχολιάσετε και να εξηγήσετε τις αλλαγές μεταξύ των ετών 2019 και 2020 των πιο κάτω αριθμοδεικτών, σύμφωνα με τους υπολογισμούς σας)

i. Gross profit margin

ii. Inventory turnover

(Marks 4)

PART B

Asklipios Express Company is a small manufacturing business that produces and sells high quality protective face masks.

The following information is available for the year ended 31 December 2020:

- Rent of premises is €400 per month
- Cost of electricity to produce one mask is estimated at €0,25
- Direct labour is €0,30 per mask produced
- Fabric and other material is €1,20 per mask
- Two sewing machines purchased, at a cost of €1.200 each, to be used in production. Each sewing machine has a scrap value of €200 and a useful life 5 years. Depreciation is to be charged on a straight line basis
- Packaging cost per mask is €0,60
- Insurance for the year is €1.800
- Wages per year total to €2.288
- Selling price of a mask is €4,15
- Sales for the year are estimated to be 20 000 masks

REQUIRED:

Calculate for the year ended 31 December 2020 the:

(a) Contribution per mask **(Marks 3)**

(b) Breakeven point (number of masks) **(Marks 4)**

(c) Profit or loss for the year if 5.000 masks are sold **(Marks 1)**

(d) Number of masks to be sold to earn a profit of €12.600 **(Marks 2)**

Note: Show all your workings.

(Total 20 Marks)

(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= $\frac{Μεικτό\ Κέρδος}{Κόστος\ πωλήσεων} \times 100\%$

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

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

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

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

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

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

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

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

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

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

**or operating profit*

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

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

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

*Average inventory= (Opening+closing)/2

(ii) Μέση Περίοδος Είσπραξης (Average collection period)

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

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

(iii) Μέση Περίοδος Πληρωμής (Average payment period)

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

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

4. Δείκτες Χρέους ή Μόχλευσης (Solvency Ratios)

(i) Δείκτης Μόχλευσης (Gearing ratio)

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

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)