**ΜΑΘΗΜΑ: ΛΟΓΙΣΤΙΚΗ**

**ΗΜΕΡΟΜΗΝΙΑ ΚΑΙ ΩΡΑ ΕΞΕΤΑΣΗΣ: ………………………………**

 **08:00 - 11:00**

|  |
| --- |
| **ΤΟ ΕΞΕΤΑΣΤΙΚΟ ΔΟΚΙΜΙΟ ΑΠΟΤΕΛΕΙΤΑΙ ΑΠΟ ΕΝΝΕΑ (9) ΣΕΛΙΔΕΣ** |

**ΟΔΗΓΙΕΣ:**

* Να απαντήσετε σε όλες τις ερωτήσεις
* 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**

**Nicosia Plc Statement of profit or loss (extract) for the year ended 31 August 2017 is given below:**

|  |  |  |
| --- | --- | --- |
|  |  | **€000** |
| Gross profit |  | 13 |
| Operating expenses |  | (5) |
| Operating profit |  | 8 |
| Finance cost |  | (3) |
| Profit before tax |  | 5 |
| Tax |  | (1) |
| Profit after tax |  | 4 |

**The Statements of financial position of Nicosia Plc as at 31 August 2017 and 2016 were as follows:**

|  |  |  |
| --- | --- | --- |
|  | **2017** | **2016** |
|  | **€000** | **€000** |
| **Non-current assets** |  |  |
| Buildings  | 120 |  125 |
| Plant and machinery  |  80 |  62 |
| **Current assets** |  |  |
| Inventory  |  45 |  55 |
| Receivables |  70 |  68 |
| Bank and cash  |  30 | - |
|  | **345** | **310** |
| **Capital and reserves** |  |  |
| Ordinary shares of €1 each  | 177,5 | 130 |
| Retained earnings  | 39,2 | 36,7 |
| Share premium  | 42,5 | 30 |
| **Non-current Liabilities** |  |  |
| 9% Loan  | 20,3 | 40,2 |
| **Current liabilities** |  |  |
| Payables | 65 | 68,1 |
| Tax  | 0,5 | 0,8 |
| Bank overdraft | - | 4,2 |
|  | **345** | **310** |

Notes:

1. During the year machinery was purchased for €20.000
2. The depreciation of plant was €2.000
3. The depreciation on Buildings was €5.000
4. Dividends paid in the year were €1.500
5. There were no disposals of PPE during the year
6. There were no accruals for interest on the reporting dates

**REQUIRED:**

Prepare a Statement of Cash Flows in accordance with IAS 7

 **(Marks 20)**

**QUESTION 2**

**(a)** The Statement of Financial Position of Alexander Plc contains the following information:

|  |  |
| --- | --- |
| **ASSETS** Non-current assets Current Assets Total assets**EQUITY AND LIΑBILITIES** Equity Share capital: equity shares of 20 cents eachShare premium Retained earnings Total equityTotal liabilities Total equity and liabilities  |  € 74.40011.60086.000   €  24.0002.80048.00074.80011.20086.000 |

The directors decide to make a 1 for 5 bonus issue, followed by a 1 for 3 rights issue at €1,20 per share.

**Required**:

1. Show the journal entries to record the rights and bonus issue.
2. Prepare the Ordinary Share Capital a/c and the Share Premium a/c.
3. Show the revised Statement of Financial Position after both share

 issues have taken place.

 (**Marks 13)**

**(b)**

1. The following information relates to the business of Perseas Plc for the month of July 2017:

 July 1. Inventory 100 units at €10 per unit

 2. Purchased 200 units at €10,50 per unit

 15. Sold 180 units at €40 per unit

 26. Purchased 50 units at €10,60 per unit

 30. Sold 60 units at €40 per unit

 The business applies the average cost method for valuing his inventory and he uses the periodic inventory system

 **REQUIRED:**

Calculate the Gross Profit for the month ended 31 July 2017

1. Να αναφέρετε τα βασικά χαρακτηριστικά της μεθόδου αποτίμησης του αποθέματος, FIFO.

 **(Marks 7)**

**(Total Marks 20)**

**QUESTION 3**

**(a)** The following information is available for the production and sales of one unit of an electrical component. The data is based on the production and sale of 600 units.

|  |  |
| --- | --- |
|  | € per unit |
| Direct materials | 30 |
| Direct labour | 20 |
| Royalties | 5 |
| Fixed costs | 30 |
| Selling price  | 100 |

**REQUIRED:**

Calculate

1. The break-even point in units produced.
2. The break-even level of sales revenue
3. The margin of safety in units
4. The profit/loss made when 200 units are produced and sold
5. The profit/loss made when 500 units are produced and sold

 **(Marks 10)**

**(b)** The managers of Sanda Plc wish to purchase a new machine. They will use the machine for four years. There are three machines that are capable of producing the quality of goods that is desired. The current cost of capital for Sanda Plc is 9%. The following is an extract from the present value tables for €1:

|  |  |
| --- | --- |
| **Year** | Rate per year |
| **1** | 0,917 |
|  **2** | 0,842 |
|  **3** | 0,772 |
|  **4** | 0,708 |

The following information is available for the three machines. All cash flows arise at the end of the relevant year.

|  |  |  |  |
| --- | --- | --- | --- |
| **Machine** | **A****€** | **B****€** | **C****€** |
| **Purchase price** | 44.000 | 49.500 | 57.500 |
| **Forecast net cash flows:** |  |  |  |
| **Year 1** | 22.000 | 23.500 | 25.000 |
|  **2** | 22.000 | 23.500 | 24.500 |
|  **3** | 20.000 | 23.500 | 24.000 |
|  **4**  | 20.000 | 22.500 | 22.000 |

**REQUIRED**

1. Calculate the NPV of each machine.
2. Advise the managers of Sanda Plc Ltd which of the three machines they should purchase.

 **(Marks 10)**

 **(Total Marks 20)**

**QUESTION 4**

**(a)**

|  |
| --- |
| The following balances are available from the books of Medick Technology manufactures of components for the medical equipment industry on 31 December 2017: |
|   | € |
| Inventory 1 January 2017: |  |
|  Raw materials  | 120.000 |
|  Work in progress  | 208.000  |
|  Finished goods  | 256.000 |
| Purchases of raw materials |  490.000 |
| Production wages |  168.000 |
| Packaging |  50.000 |
| Management salaries: |  |
|  Production  Office  | 270.000325.000 |
| Production equipment (at cost) |  420.000 |
| Accumulated depreciation-Production equipment  | 192.000 |
| Premises rent  | 160.000 |
| General office expenses  | 148.000 |
| Sales  |  2.600.000 |
| Office computers (at cost) |  80.000 |
| Accumulated depreciation - office computers  |  24.000 |

**Additional information at 31 December 2017:**

The following balances are available from the books on 31 December 2017:

1. Inventory 31 December 2017 was valued at:

 Raw materials €110.000

 Work in progress €198.000

 Finished goods €226.000

1. Production wages accrued € 26.000.
2. Packaging is 70% direct and 30% indirect.
3. Premises rent and is to be apportioned 75% to production and 25% to the office
4. General office expenses owing €6.000
5. Depreciation is charged on production equipment at the rate of 25% per annum

 reducing balance method. Office computers are depreciated at the rate of 20%

 per annum using the straight-line method

 **REQUIRED:**

 Prepare the Manufacturing Account for the year ended 31 December 2017

 showing clearly the cost of material used, the prime cost, and the cost of

 production. (Marks **20)**

 **Total Marks 20**

|  |
| --- |
| **QUESTION 5** |
| Ledra Park Ltd extracted the following balances at 31 December 2016: |
|  | **€** |
| Allowances for irrecoverable debts | 2.598 |
| Carriage inwards | 13.000 |
| Carriage outwards | 18.450 |
| Discount allowed | 1.500 |
| Fixtures and fittings accumulated depreciation | 8.000 |
| Fixtures and fittings at cost | 240.000 |
| General administration expenses | 37.560 |
| General distribution costs | 22.970 |
| Irrecoverable debts | 1.500 |
| Office buildings at cost | 121.000 |
| Loan at 10% | 50.000 |
| Accumulated depreciation of machinery | 23.000 |
| Machinery at cost | 40.000 |
| Accumulated depreciation of Motor vans | 12.000 |
| Motor vans at cost | 30.000 |
| Opening inventory | 23.540 |
| Purchases returns | 2.900 |
| Purchases | 262.900 |
| Sales |  475.678 |
| Sales returns | 4.678 |
| Trade payables | 38.850 |
| Trade receivables | 33.700 |
| Wages and salaries | 46.500 |
| Warehouse rent | 8.000 |

Additional information:

* On 1 June 2016 a motor van, cost €10.000, with accumulated depreciation of €7.600 was sold for €5.000. This has not yet been recorded in the books.
* The depreciation policy is to be charge a full year’s depreciation in the year of acquisition and none in the year of disposal
* Inventory at 31 December 2016 was valued at €32.350. This included damaged goods costing €4.000. These goods can be repaired at an additional cost of €350 and can be sold for €4.250
* Wages, and salaries, €3.500, were outstanding. The wages and salaries were shared between administration expenses and distribution costs in the ratio of 70% and 30% respectively
* Allowances for irrecoverable debts was to be maintained at 10% of trade receivables
* The warehouse rent included €1.500 for the quarter ending 31 January 2017.
* Depreciation is to be charged as follows:

|  |  |  |
| --- | --- | --- |
| **Non-Current Assets** |  **Method** |  **Apportionment** |
| Office buildings | 10% straight line |  |
| Motor vans | 20% reducing balance |  |
| Machinery | 20% reducing balance | Administration expense 75%Distribution cost 25% |
| Fixtures and fittings | 10% straight line | Administration expense 75%Distribution cost 25% |

 **REQUIRED:**

Prepare Ledras Park’s Ltd Income Statement for the year ended 31 December 2016, in line with IAS 1, classifying the expenses by function

 **Marks 20**

**GRAND TOTAL MARKS 100**

**--- END ---**

**ANSWER 1**

 ***NICOSIA plc***

 **STATEMENT OF CASH FLOW for the year ending 31 .8 2017**

|  |  |  |
| --- | --- | --- |
| **CASH FLOWS FROM OPERATING ACTIVITIES** | € | € |
| Profit before tax | 5.000 |  |
| *Add* Finance cost | 3.000 |  |
| *Add* Depreciation charge(2.000+5.000) | 7.000 |  |
| ***Operating cash flow before working capital changes*** | **15.000** |  |
|  Add: Decrease in inventories | 10.000 |  |
| Less :Increase in trade receivables | (2.000) |  |
| Less: Decrease in trade payables | (3.100) |  |
| **Cash generated from operations** | **19.900** |  |
| Less interest paid | (3.000) |  |
| Less tax paid (w1) | (1.300) |  |
| ***Net Cash flow from operating Activities*** |  | **15.600** |
| **CASH FLOW FROM INVESTING ACTIVITIES** |  |  |
| Payments to acquire non-current assets | (20.000) |  |
| ***Net Cash Used in Investing Activities*** |  | **(20.000)** |
| **CASH FLOW FROM FINANCING ACTIVITIES** |  |  |
| Proceeds from issue of shares (177.500+42.500)-(130.000+30.000) | 60.000 |  |
| Repayment of 9% Loan (40.200-20.300) | (19.900) |  |
| Dividends Paid  | (1.500) |  |
| ***Net Cash Flow from Financing Activities*** |  | **38.600** |
| **Net increase in cash and cash equivalents** |  | **34.200** |
|  |  |  |
| Cash and cash equivalents at the beginning of the year |  | **-4.200** |
| Cash and cash equivalents at the end of the year |  | **30.000** |
| Net increase in cash and cash equivalents |  | **34.200** |
|  |  |  |

|  |
| --- |
| **(1)** **Corporation tax** |
|  | € |  | € |
| **Cash - paid** | **1.300** | Balance b/d |  800 |
| Balance c/d |  500 | SOPL- charge for the year |  1.000 |
|  | 1.800 |  |  1.800 |

**ANSWER 2 (a) JOURNAL**

|  |  |  |  |
| --- | --- | --- | --- |
| (i) |  | Dr  | Cr  |
|  |  |  €  |  €  |
|   | Share Premium | 2.800 |  |
|  | Retained earnings\*(4.800-2.800) | 2.000 |  |
|  | Ordinary share capital(24.000X0.2) |  | 4.800 |
|  | Cash (48.000x€1.20) | 57.600 |  |
|  | Share Premium (48.000x€1.00) |  | 48.000 |
|  | Ordinary share capital(48.000x€0.20) |  | 9.600 |
| \*Note: For the bonus issue any reserve can be utilised but preferably the share premium reserve is used first (capital reserve/non-distributable) Since there is not enough in this case part of the Retained earnings (4.800-2.800) is also used in order to cover the bonus issue |
| **Για την δωρεάν έκδοση μπορεί να χρησιμοποιηθεί οποιονδήποτε αποθεματικό, αλλά κατά προτίμηση χρησιμοποιείται το μη διανεμηθέν αποθεματικό, δηλαδή τα κεφαλαιουχικά αποθεματικά όπως το αποθεματικό από την έκδοση μετοχών υπέρ το άρτιο (share premium). Σε αυτή την περίπτωση το ποσό δεν είναι αρκετό για να καλυφθεί πλήρως η δωρεάν έκδοση για αυτό χρησιμοποιείται μέρος των Retained earnings (4.800-2.800)** |
| 1. **Ordinary share capital A/c**
 |
|  |  | € |  |  | € |
|  | B/ce c/d | 38.400 |  | B/ce b/d(120.000x 0,20) | 24.000 |
|  |  |  |  | Share premium /R Earn.(bonus) (24.000x0,20) | 4.800 |
|  |  |  |  | Cash (rights)(48.000x 0.20) | 9.600 |
|  |  | 38.400 |  |  | 38.400 |
|  |  |  |  | B/ce b/d | 38.400 |
| **Share premium A/c** |
|  |  | € |  |  | € |
|  | Ordinary share capital(Bonus) |  2.800 |  | B/ce b/d |  2.800 |
|  | B/ce c/d |  48.000 |  | Cash(Rights)(48.000x1) | 48.000 |
|  |  | 50.800 |  |  | 50.800 |
|  |  |  |  | B/ce b/d | 48.000 |

***WORKING***

|  |
| --- |
|  **Ordinary shares in issue / PAR VALUE €0.20**  |
|  |  **shares** | **€** |
|  Balance at start (€24.000÷0,20) | 120.000 | 24.000 |
|  Add: bonus issue (120.000÷5) | 24.000 | 4.800 |
|   | 144.000 | 28.800 |
| Add: Rights issue 144.000/3 | 48.000 | 9.600 |
| Balance at end  | 192.000 | 38.400 |

(iii) The Statement of Financial Position of Alexander Plc (after bonus and rights issue):

|  |  |
| --- | --- |
| **ASSETS** Non-current assets Current Assets (11.600+57.600)Total assets**EQUITY AND LIΑBILITIES** ***Equity*** Share capital: equity shares of 20 cents each (192.000 Sharesx0.20) Share premium (2.800-2.800+48.000) Retained earnings (48.000-2.000)Total Equity***Total Liabilities*** Total Equity and Liabilities  |  € 74.40069.200143.600   €  38.40048.00046.000132.40011.200143.600 |

**ANSWER 2 (b)**

**(b) I. Income Statement for the month of July**

|  |  |
| --- | --- |
|  | **AVCO** |
| Sales (180+60)X40 | **9.600** |
| **Less: Cost of Sales** |  |
| Opening Inventory | 1.000 |
| Purchases (200X10.5)+(50X10.6) | 2.630 |
| Closing Inventory |  (1.141) |
| **COST OF SALES** | **2.489** |
| **Gross Profit** | **7.111** |

***Workings***

**Calculation of closing inventory**

Total Inventory Cost\* / Total Units = €3.630/ 350 units = €10.37 per unit

Closing Inventory\*\*: 110 units x €10.37= **€1.141**

**Calculation of Cost of Sales** €

Total Inventory Cost 3.630

Less: Closing Inventory 1.141

**Cost of Sales**   **2.489**

|  |  |
| --- | --- |
|  **€**\*100 units at €10 = 1.000 200 units at €10.5 = 2.100 50 units at €10.6 = 530 **350**  **3.630** |   **units**\*\*open. Inventory 100 Purchases(200+50) 250 Sales (180+60) (240)  **110** |

**II**

|  |
| --- |
| * Αυτή η μέθοδος αποτιμά το τελικό απόθεμα στο ***πιο πρόσφατο κόστος*** και περιλαμβάνει τα πρώτα κόστη στο κόστος πωλήσεων.
 |
| * Κατά την περίοδο όπου **υπάρχει αύξηση στις τιμές,** η μέθοδος αυτή υπολογίζει το **μεγαλύτερο δυνατό ποσό καθαρών κερδών** επειδή το κόστος πωλήσεων εμφανίζει τα πρώτα κόστη τα οποία είναι χαμηλότερα κατά τη διάρκεια της περιόδου αύξησης των τιμών καθώς επίσης και το τελικό απόθεμα αποτιμάται στη μεγαλύτερη δυνατή αξία.
 |
| * Στην αντίθετη περίπτωση της **μείωσης των τιμών**, η μέθοδος τείνει **να μειώνει** **το αποτέλεσμα** **(το κέρδος ή τη ζημιά)** μέσω της καταχώρησης των παλαιότερων και υψηλότερων τιμών στο κόστος των πωλήσεων.
 |

**ANSWER 3**

**(a**) **(i)** $Break even= \frac{Total fixed costs\*}{Contribution per unit\*\*}= \frac{€18.000}{€45}=400 units$

 \*600 X €30

 \*\*100-(30+20+5)

**(ii)** Break-even sales revenue = 400 units x €100 =**€40.000**

**(iii)** Margin of safety =600 – 400 = **200 units**

**(iv)** Profit/loss (200 units)= Total contribution – Fixed costs

 = (200 x €45) – €18.000= **(€9.000) Loss**

**(v)** Profit/loss (500 units)= Total contribution – Fixed costs

 = (800 x €45) - €18.000= **€18.000 Profit**

**(b) (i)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Discount factor****9%** |  **Machine A** **€ €** | **Machine B****€ €** | **Machine C****€ €** |
| 0 | 1 | (44.000) | (44.000) | (49.500) | (49.500) | (57.500) | (57.500) |
| 1 | 0,917 | 22.000 | 20.174 | 23.500 | 21.550 | 25.000 | 22.925 |
| 2 | 0,842 | 22.000 | 18.524 | 23.500 | 19.787 | 24.500 | 20.629 |
| 3 | 0,772 | 20.000 | 15.440 | 23.500 | 18.142 | 24.000 | 18.528 |
| 4 | 0,708 | 20.000 | 14.160 |  22.500 | 15.930 | 22.000 | 15.576 |
| **NPV** |  | **24.298** |  | **25.909** |  | **20.158** |

(c) On financial grounds Sandra Plc should choose machine B which gives the highest positive NPV. The other two machines also yield a positive NPV but lower than machine B.

**Από οικονομικής πλευράς η Sandra Plc θα πρέπει να επιλέξει την μηχανή Β ,η οποία δίνει την ψηλότερη Καθαρή Παρούσα Αξία (NPV) συγκριτικά με τις άλλες δύο μηχανές .**

 **ANSWER 4**

|  |
| --- |
| **Medick Technology****Manufacturing account for the year ended 31 December 2017** |
| **Raw Materials** | **€** | **€** |
| Inventory at 1 January 2017 |  | 120.000 |
| Purchases |  | 490.000 |
|  |  | 610.000 |
| Inventory at 31 December 2017 |  | (110.000) |
| Cost of Raw Materials used  |  | 500.000 |
| Direct labour (168.000+26.000) | 194.000 |  |
| Packaging (50.000x70%) | 35.000 | 229.000 |
| **PRIME COST** |  | 729.000 |
| **Factory Overheads** |  |  |
| Management salaries | 270.000 |  |
| Premises rent – Factory (160.000x75%) | 120.000 |  |
| Packaging (50.000x30%) | 15.000 |  |
| Depreciation of production equipment(420.000-192.000)x25% |  57.000 | 462.000 |
|  |  | 1.191.000 |
| **Work in progress** |  |  |
| Opening inventory | 208.000 |  |
| Less: Closing inventory | (198.000) | 10.000 |
| **Production cost of goods completed** |  | 1.201.000 |

**ANSWER 5**

|  |
| --- |
|  **Ledra Park Ltd****Statement of Profit or Loss** **for the year ended 31 December 2016** |
|  | **€** |
| Revenue | 471.000 |
| Cost of sales | (264.290) |
| **Gross profit** | 206.710 |
| Distribution expenses | (71.290) |
| Administrative expenses |  (108.982) |
| **Profit from operations** | 26.438 |
| Finance costs | (5.000) |
| **Profit for the year before tax** | 21.438 |

**Workings:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | € |  | € | € |
| Sales | 475.678 | **Cost of sales:** |  |  |
| Less Returns inwards | (4.678) | Opening inventory |  | 23.540 |
|  | **471.000** | Add Purchases | 262.900 |  |
|  |  | Add carriage in  | 13.000 |  |
| **Finance cost** |  | Less Returns outwards | (2.900) | 273.000 |
| 50.000x10% | **5.000** |  |  | 296.540 |
|  |  | Less Closing inventory(32.350-***4.000*)+(*4.250-350***) |  | (32.250) |
|  |  |  |  | 264.290 |
|  |  | Lower of Cost and NRV |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Distribution costs:** | **€** | **Administrative expenses:** | **€** |
| Wages and salaries (46.500+3.500)X30% |  15.000 | Wages and salaries(46.500+3.500)X70% |  35.000 |
| General distribution costs | 22.970 | Irrecoverable debts | 1.500 |
| Carriage outwards | 18.450 | General administration costs | 37.560 |
| Warehouse rent(8.000-500) | 7.500 | Discount allowed | 1.500 |
| Depreciation: Machinery(40.000-23.000)x20%x25% | 850 | Allowance for I.D(33.700X10%) - 2.598 | 772 |
| Motor vehicles (30.000-10.000)-(12.000-7.600)x20% |  3.120 | Depreciation: Machinery(40.000-23.000)x20%x75% | 2.550 |
| Depreciation: F&F(240.000X10%)X25% | 6.000 | Depreciation: office buildings (121.000x10%) |  12.100 |
| Profit on disposal of motor van | \*(2.600) | Depreciation: F&F(240.000X10%)X75% |  18.000 |
|  | 71.290 |  | 108.982 |

\*Profit on disposal could alternatively been shown as other income on the face of SOPL