**MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD**

**UNIVERSITY OF MALTA, MSIDA**

**MATRICULATION EXAMINATION**
**ADVANCED LEVEL**
**MAY 2016**

| | |
|---|---|
| **SUBJECT:** | ACCOUNTING |
| **PAPER NUMBER:** | I |
| **DATE:** | 26th April 2016 |
| **TIME:** | 9.00 a.m. to 12.05 p.m. |

## Directions to Candidates

Answer **ALL** questions in **SECTION A**.
Answer the question in **SECTION B**. **This question is compulsory**.
Answer any **TWO** questions from **SECTION C**.

You must show the working leading up to your answers.

Candidates may only use non-programmable calculators in this examination.

**<u>Section A</u>: Answer ALL questions in this section. This section carries a total of 22 marks.**

**Question 1**

Briefly explain what you understand by the term 'gearing' <u>and</u> comment on the statement '*It is better for an entity to have no borrowings at all*'. **(3 marks)**

**Question 2**

Some clubs operate a life membership scheme. Explain how such a scheme would be treated in the accounts, identifying the accounting principle being applied. **(3 marks)**

**Question 3**

a) Explain the difference in the accounting treatment of changes in accounting estimates and changes in accounting principles. **(2 marks)**

b) Give <u>one</u> example of a change in accounting estimate and <u>one</u> example of a change in accounting principles. **(2 marks)**

**Question 4**

Explain the difference between a provision and a contingent liability <u>and</u> highlight their accounting treatment. **(4 marks)**

**Question 5**

a) Briefly explain the terms 'Memorandum of Association' and 'Articles of Association' prepared upon company formation. **(2 marks)**

b) Mention <u>two</u> differences between a private and a public company. **(2 marks)**

**Question 6**

Define <u>each</u> of the following accounting concepts:

a) Going concern.

b) Materiality. **(4 marks)**

**<u>Section B</u>: Answer Question 7 in this Section. This question is compulsory and carries 26 marks.**

## Question 7

Ausara Ltd extracted the following Trial Balance from its books on 30 September 2015:

| | € | € |
|---|---|---|
| Purchases | 205,000 | |
| Revenue | | 389,000 |
| Returns In/Returns Out | 15,000 | 8,400 |
| Carriage In | 10,000 | |
| Inventories (30 September 2014) | 95,000 | |
| Water and Electricity | 30,050 | |
| Advertising | 6,420 | |
| Discounts Allowed/Discounts Received | 16,420 | 13,500 |
| Administration Expense | 10,150 | |
| Commission Expense | 2,900 | |
| Debenture Interest | 1,200 | |
| Land | 300,000 | |
| Buildings at cost | 180,000 | |
| Furniture & Fittings at cost | 40,800 | |
| Motor Vehicles at cost | 31,200 | |
| Depreciation Allowance on Buildings | | 8,000 |
| Depreciation Allowance on Furniture & Fittings | | 10,500 |
| Depreciation Allowance on Motor Vehicles | | 12,000 |
| Trade Receivables/ Trade Payables | 35,000 | 25,000 |
| Ordinary Shares of €1 each | | 400,000 |
| 4% Debentures | | 60,000 |
| Share Premium | | 125,000 |
| Retained Earnings | | 70,700 |
| Revaluation Reserve | | 50,000 |
| Interim Dividend | 40,000 | |
| Bank | 152,960 | |
| | **<u>1,172,100</u>** | **<u>1,172,100</u>** |

Additional information:

1. Inventories at 30 September 2015 were valued at cost for €120,000. Inventory items costing €15,000 were identified as slow moving during the stock taking exercise. It is estimated that these items could only be sold if substantially discounted to €8,500.

2. Revenue includes €9,000 for goods sold on a sale-or-return basis to a new client. This transaction was recorded as a normal credit sale. Ausara Ltd normally sets prices at a gross profit mark-up of 100%.
3. With effect from 1 October 2014, the company decided to motivate its sales staff by introducing a sales commission of 1% of gross revenue.
4. Water and electricity expense due but still not yet paid at the year-end amounted to €3,200, while advertising costs still outstanding amounted to €2,600.
5. It is company policy to carry land at its fair value. The market value of the land at 30 September 2015 is estimated at €350,000.
6. The company carries the rest of its non-current assets at cost less depreciation. Motor Vehicles and Furniture & Fittings are depreciated using the reducing balance method at 20% and 15% respectively.
7. Buildings are depreciated on a straight-line basis. On 1 October 2014, the company completed a major structural upgrade to its buildings. After the renovation, it was estimated that the remaining useful life of the buildings increased from 20 years to 25 years. The accounting entries related to the upgrade have been correctly reflected in the company's books.
8. On 1 April 2015, the directors made a bonus issue of 1 for every 5 shares held by capitalising the share premium. This has not yet been accounted for the in books of Ausara Ltd.
9. Debentures were issued on 1 March 2015, with interest payable every 6 months.
10. Audit fees of €15,000 have not been provided for.

**Required:**

**A.** For the year ended 30 September 2015, prepare the following statements for Ausara Ltd:

  i. A Statement of Comprehensive Income. **(15 marks)**

  ii. A Statement of Changes in Equity. **(5 marks)**

**B.** Prepare a Statement of Financial Position as at 30 September 2015. **(6 marks)**

**<u>Section C</u>: Answer any TWO questions from this Section. Each question carries 26 marks.**

## Question 8

All business records of Mr. Seafarer were kept in a semi basement office forming part of his workplace. In the February rains, the office was flooded and most of his records were destroyed or rendered undecipherable. He asks for your help to help him calculate his profits for the accounting year ended 31 December 2015. From bits of information he has salvaged and the previous year's records, he manages to provide you with the following information:

| | **1 January 2015** | **31 December 2015** |
|---|---:|---:|
| | **€** | **€** |
| Bank | 18,000 | 50,000 |
| Cash | 4,700 | 7,000 |
| Trade Receivables | 78,000 | 92,000 |
| Trade Payables | 56,000 | 41,000 |
| Inventories | 64,000 | 93,000 |
| Rent Prepaid | 4,000 | ? |
| Non-current Assets | 180,000 | ? |
| Depreciation Allowance | 55,000 | ? |
| Long term Loan | 80,000 | 50,000 |

1. Mr. Seafarer had withdrawn €500 weekly on a regular basis, besides taking goods for his private use costing €3,400.
2. During the year, an investment of €15,000 had matured and he had deposited this in his business bank account. The investment formed part of Mr. Seafarer's private assets.
3. During the year, he had sold non-current assets for €8,600. These had originally cost €22,000 but, when sold, had accumulated depreciation of €9,400.
4. New equipment was purchased for €36,000. It is company policy to write off non-current assets over six years and the residual value is estimated at 10% of their original cost. None of the non-current assets on the books had been in use for more than five years.
5. From bank records, you calculate that other running costs paid amounted to €36,200.
6. From credit notes salvaged, you deduce that returns in amounted to €11,200 and returns out to €8,400. You also discover that inventories on a sale-or-return basis recorded at a selling price of €12,000 were not included in the above balances.
7. Bad debts during the same year amounted to €3,200, while a bad debt of €500 from the previous year was recovered.
8. The Rent contract stipulates an annual payment of €24,000 to be paid in advance every three months. The next payment is due on 1 March 2016.
9. Mr. Seafarer sells his goods at cost plus 33⅓% profit mark-up.
10. The loan was given to him by a relative and is interest free.

**Required:**

**A.** Prepare statements of affairs at the beginning and end of year and calculate Mr. Seafarer's net profit for the year ended 31 December 2015. **(10 marks)**

**B.** Prepare Mr. Seafarer's Statement of Profit or Loss for the period ended 31 December 2015, in as much detail as possible. **(8 marks)**

**C.** Assuming that all sales and purchases were on credit, prepare control accounts to calculate receipts from debtors and payments to creditors during the year. **(4 marks)**

**D.** Mr. Seafarer was rather perplexed with your treatment of his drawings and investment deposit. Explain your treatment of these two items, and the accounting concepts involved. **(4 marks)**

## Question 9

On 1 January 2015, the Tuna Canning plc had a number of machines with a total cost of €480,000 and accumulated depreciation allowance of €82,000. The company's policy is to provide depreciation at 40% annually on the reducing balance method. Depreciation is only provided on machinery on the company's books at the end of the year.

During the year to 31 December 2015 the movements in the machinery account were as follows:

1. A machine was sold for €5,600. This machine was bought in 2012 for €25,000.
2. A new machine was purchased for €32,000. In October, just six months after it had been purchased, it was found not adequate for its intended purpose and was part-exchanged for another one costing €45,000. The trade-in allowance for the slightly used machine was €20,000.
3. An existing machine with a net book value of €18,000 as at 31 December 2014, and an estimated remaining life of 8,000 hours, is required for the production of a new line. Total production time required for the new line is 20,000 hours. In order to extend the life of the machine accordingly, an attachment costing €8,400 was purchased. During 2015, the improved machine was used for 9,000 hours. Management decided to depreciate this machine in a way that reflects its current use.
4. A machine, which had originally cost €20,000 had been fully depreciated by 31 December 2014. It was still on the books on 31 December 2015, and expected to be used for a further 2 years.

**Required:**

**A.** For the period ended 31 December 2015, prepare for the Tuna Canning plc the Machinery Account, the Machinery Depreciation Allowance Account, and the Disposal Account, showing clearly the transfers to the Statement of Profit or Loss. **(21 marks)**

**B.** 'Since no movement of funds is involved, why bother to provide for depreciation?' argues one of the directors. Explain to this director why depreciation of non-current assets has to be provided for, making reference to relevant accounting concepts. **(5 marks)**

**Question 10**

The following are the summarised Statements of Financial Position of Boatshed plc as at 31 March 2015 and 31 March 2016:

| | **31-Mar-16** | | **31-Mar-15** | |
|---|---|---|---|---|
| | € | € | € | € |
| Premises | 609,000 | | 500,000 | |
| Machinery | 315,000 | | 305,000 | |
| Fixtures | 85,000 | 1,009,000 | 80,000 | 885,000 |
| Inventories | 36,500 | | 38,000 | |
| Trade receivables | 29,300 | | 18,600 | |
| Bank | 23,600 | 89,400 | 18,200 | 74,800 |
| | | 1,098,400 | | 959,800 |
| Ordinary share capital | | 800,000 | | 600,000 |
| Revaluation Reserve | 100,000 | | - | |
| Share Premium | 20,000 | | 120,000 | |
| General Reserve | 84,000 | | 70,000 | |
| Retained earnings | 20,000 | 224,000 | 24,000 | 214,000 |
| 8% debentures | | - | | 100,000 |
| Trade payables | | 74,400 | | 45,800 |
| | | 1,098,400 | | 959,800 |

The following information regarding the year ended 31 March 2016 is available:

1. The premises were professionally revalued upwards by €100,000 but it was felt that a new shed was needed and this was built at a cost of €25,000.
2. Machinery with a book value of €15,000 was sold for €8,000 and additional machinery costing €50,000 was acquired.
3. Additional fixtures were bought for €20,000.
4. A bonus issue of 1 share for every 5 was made from the share premium account. This was followed by an issue of shares at a premium of €0.25 per share.
5. Dividends of €30,000 and €56,000 were paid in March 2015 and March 2016, respectively.
6. The debentures were redeemed on 31 December 2015, and interest was paid up to that date.

**Required:**

**A.** Prepare a Statement of Cash flows for the period ended 31 March 2016. **(22 marks)**

**B.** Mention <u>and</u> explain <u>two</u> differences between the Statement of Cash flows and the Statement of Profit or Loss. **(4 marks)**

## Question 11

Following are details extracted from the financial statements of Jockey Wheel plc for the two years ended on 31 December 2014 and 2015:

| | 2015 | | 2014 | |
|---|---|---|---|---|
| | **€000** | **€000** | **€000** | **€000** |
| ***Statement of Financial Position*** | | | | |
| Property, Plant & Equipment | | **180** | | **210** |
| Inventories | 24 | | 24 | |
| Trade Receivables | 36 | | 36 | |
| | | **60** | | **60** |
| | | **240** | | **270** |
| Ordinary Share Capital | | 135 | | 135 |
| Retained earnings | | 16 | | 10 |
| | | **151** | | **145** |
| Long-term loan | | **50** | | **50** |
| Trade Payables | 18 | | 18 | |
| Bank Overdraft | 21 | | 57 | |
| | | **39** | | **75** |
| | | **240** | | **270** |
| ***Statement of Profit or Loss*** | | | | |
| Sales | | 360 | | 300 |
| Cost of sales | | (210) | | (180) |
| Gross Profit | | **150** | | **120** |
| Administration & selling expenses | | (93) | | (84) |
| Loan interest | | (4) | | (4) |
| Net Profit | | **53** | | **32** |

Further information:

a) Ordinary Share Capital is made up of shares of nominal value €0.50 each.

b) The shares are trading on the equity market at €0.60 per share as at 31 December 2015, which is the same price as the previous year.

c) Dividends of €30,000, and €47,000 were paid in the years 2014 and 2015 respectively.

**Required:**

**A.** Calculate the following ratios for Jockey Wheel plc for the two years 2014 and 2015:

i. Gross profit margin;
ii. Net profit margin;
iii. Return on Capital Employed;
iv. Current ratio;
v. Quick asset ratio;
vi. Inventory turnover;
vii. Interest cover;
viii. Earnings per share;
ix. Gearing. **(9 marks)**

**B.** Based on the ratios calculated in (A), prepare a report to the directors of Jockey Wheel plc concerning the profitability, liquidity and efficiency of the company over the two-year period. **(9 marks)**

**C.** Explain why the Earnings per share calculated in (A) differs from the market value of the shares given in the question. **(4 marks)**

**D.** Describe two instances where ratio analysis may be applied, and highlight two limitations of such techniques. **(4 marks)**

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**MATRICULATION EXAMINATION**
**ADVANCED LEVEL**
**MAY 2016**

| | |
|---|---|
| **SUBJECT:** | ACCOUNTING |
| **PAPER NUMBER:** | II |
| **DATE:** | 27th April 2016 |
| **TIME:** | 9.00 a.m. to 12.05 p.m. |

## Directions to Candidates

Answer **ALL** questions in **SECTION A**.
Answer any **THREE** questions from **SECTION B**.

You must show the working leading up to your answers.

Candidates may only use non-programmable calculators in this examination.

**Section A: Answer ALL questions in this section. This section carries a total of 22 marks.**

**Question 1**

Briefly explain the difference between Normal Loss and Abnormal Loss. **(3 marks)**

**Question 2**

a) How is a predetermined absorption rate calculated?
b) Why are absorption rates calculated? **(3 marks)**

**Question 3**

a) Briefly explain the differences between job costing and process costing.
b) Mention two industries that use job costing and two industries that use process costing.

**(4 marks)**

**Question 4**

a) Briefly explain the difference between time-rates and piece-rates methods of labour remuneration.
b) Identify one advantage and one disadvantage associated with each method. **(4 marks)**

**Question 5**

In cost accounting, inventory can be valued on a marginal cost basis or on a full absorption basis. Explain why the two inventory valuation methods may result in different reported profits.

**(4 marks)**

**Question 6**

Explain ‘overtime premium’, specifying whether this is treated as a direct or an indirect cost, and briefly explain the reason for this treatment. **(4 marks)**

**<u>Section B</u>: Answer any THREE questions from this Section. Each question carries 26 marks.**

**Question 7**

Toa Limited manufactures one product. The company is in the process of preparing its annual budgets for the coming year. Budgets are prepared using standard costs, which have not changed from the previous year.

The following is the standard cost data per unit:

| **<u>Materials</u>** | **Price per kg - €** | **Quantity - kg** |
|---|---|---|
| Material X | 2.00 | 30 |
| Material Y | 3.00 | 15 |
| | | |
| **<u>Direct labour</u>** | **Rate per hour - €** | **Quantity - hours** |
| Skilled | 10.00 | 4 |
| Unskilled | 7.00 | 6 |

Production overheads are absorbed on a direct labour hour basis. The budgeted production overheads for next year are €3,500,000 and total direct labour hours are estimated at 1,400,000 hours.

The company transfers finished goods to cost of sales at cost of production. Selling and distribution costs are allocated at 15% of cost of sales, and administration costs are 5% of budgeted production cost. Profit is budgeted at a mark-up of 20%.

Other budgeted data related to inventory is as follows:

| **Inventory** | **Finished goods** | **Material X** | **Material Y** |
|---|---|---|---|
| | **€** | **€** | **€** |
| At beginning of year | 2,812,500 | 787,500 | 80,000 |
| At end of year | 937,500 | 562,500 | 87,500 |

**Required:**

**A.** For the coming year, prepare the:
   i. Production budget in units;
   ii. Production cost budget;
   iii. Purchases budget;
   iv. Budgeted profit statement. **(20 marks)**

**B.** What is a flexible budget? Give an example to show how a flexible budget can be used by management for budgetary control. **(6 marks)**

## Question 8

A renowned fashion brand manufacturer produces high quality coats for export, selling at €250 per item. The following information is available for the year ended 31 December 2015:

| | |
|---|---|
| Number of items sold and produced | 20,000 items |
| | **€** |
| Prime Cost per unit | 80 |
| Total Factory Indirect costs: | |
| Variable | 1,000,000 |
| Fixed | 75,000 |
| Total Selling and Distribution costs: | |
| Variable | 400,000 |
| Fixed | 65,000 |
| Total Administration costs: | |
| Fixed | 360,000 |

Due to increasing competition from other quality brands, selling and distribution costs include a commission of 5% of sales value.

**Required:**

**A.** Calculate the contribution per item. **(2 marks)**

**B.** Draw a break-even chart (graph). **(4 marks)**

**C.** From the break-even chart in (B), measure the break-even point and margin of safety in sales value, and the profit for the year. **(6 marks)**

**D.** Prepare separate statements showing the profit:

i. If unit selling price is decreased by 10% thereby increasing sales volume by 20% of normal level;

ii. If unit selling price is increased by 10% resulting in a decrease in sales volume of 10% of normal level. **(10 marks)**

**E.** Mention and briefly comment on <u>two</u> limitations associated with break-even analysis.

**(4 marks)**

## Question 9

Malta Treasures Ltd manufactures a premium quality product mainly for the export market. The budgeted sales and production for the month of March 2016 is 12,000 units. The profit mark-up is of 10%. Standard costing figures for each unit are as follows:

| | |
|---|---|
| Material A | 15 kilograms at € 2.00 per kg |
| Material B | 9 kilograms at € 3.00 per kg |
| Direct Labour Hours | 10 hours at € 7.00 per hour |
| Production Overheads | 150% of Direct Labour Costs |

Actual sales and production for March 2016 was 12,200 units. These units were sold at €248.00 per unit. Other actual results for the month were as follows:

| | |
|---|---|
| Material A | 170,800 kilograms at € 1.80 per kg |
| Material B | 122,000 kilograms at € 3.20 per kg |
| Direct Labour Hours | 112,240 hours at € 7.20 per hour |
| Production Overheads | € 1,330,000 |

**Required:**

**A.** Calculate the budgeted profit and the actual profit for the month of March 2016. **(6 marks)**

**B.** Calculate the following variances for the month of March 2016:

i. Total material variance analysed into price variance and usage variance, for each type of material;

ii. Total labour variance analysed into rate variance and efficiency variance;

iii. Total production overhead variance analysed into expenditure and volume variance; and

iv. The sales price variance and the sales volume variance. **(14 marks)**

**C.** Prepare a statement reconciling the budgeted profit with the actual profit. **(2 marks)**

**D.** Mention two advantages and two disadvantages of using variance analysis for decision making. **(4 marks)**

## Question 10

Josef Vella has just graduated from business school and, with the financial support of his father, has decided to open an import and distribution outlet selling computer games. He is seeking your advice as a management accountant in order to determine which method of inventory valuation to adopt. You decide to help him out and illustrate the effect of different valuation methods by focusing on the main inventory item. The following information is available with respect to this product for the month of April 2016 which is the first month of operations:

| Purchases | Units | Price per Unit | Freight Costs - Total | Insurance Costs – Total |
|---|---|---|---|---|
| | | € | € | € |
| 1st April | 1,600 | 152 | 4,800 | 2,400 |
| 7th April | 450 | 153 | 2,160 | 1,080 |
| 19th April | 1,260 | 155 | 3,780 | 2,268 |
| 27th April | 1,320 | 162 | 4,752 | 2,376 |

Sales for the month of April 2016 were as follows:

| Sales | Units | Selling Price per Unit |
|---|---|---|
| | | € |
| 3rd April | 620 | 175 |
| 5th April | 830 | 175 |
| 12th April | 480 | 175 |
| 20th April | 940 | 175 |
| 29th April | 1,150 | 185 |

**Required:**

**A.** Calculate the inventory value as at 30 April 2016 using the following methods of valuation:

i. First In First Out (FIFO);

ii. Weighted Average Cost (AVCO).

*The inventory value per unit is to be calculated to the nearest 2 decimal places.*

**(14 marks)**

**B.** Calculate the gross profit for the month of April 2016 using both methods of inventory valuation. **(6 marks)**

**C.** Josef Vella is still undecided as to which inventory valuation method to adopt. He asks what will happen if, after choosing one method, he decides to change the inventory valuation method at a future date. Explain to Josef how such a change in the inventory valuation method would be accounted for. **(6 marks)**

## Question 11

Vanfreeze Limited manufactures freezer boxes for commercial vehicles. The company has two production departments, namely the Cutting Department and the Assembly Department. The production departments are serviced by three departments, namely, the canteen; the stores; and the maintenance department.

Budgeted factory overheads for the year ended 31 December 2015 were as follows:

| | € |
|---|---:|
| Indirect wages | 940,800 |
| Indirect materials | 36,008 |
| Electricity | 35,682 |
| Rent | 289,950 |
| Insurance of premises | 20,310 |
| Depreciation of machinery | 80,100 |

The following information is available for each cost centre:

| | **Cutting** | **Assembly** | **Canteen** | **Stores** | **Maintenance** |
|---|---|---|---|---|---|
| Number of total employees | 68 | 104 | 5 | 2 | 3 |
| Indirect materials – € | 6,150 | 12,686 | 5,312 | 6,476 | 5,384 |
| Electricity units | 206,000 | 83,200 | 5,400 | 1,200 | 1,550 |
| Floor area (sq. m.) | 26,200 | 27,300 | 1,200 | 12,200 | 800 |
| Machinery cost – € | 420,000 | 365,000 | - | - | 16,000 |
| Machine hours | 160,000 | 38,000 | - | - | 5,000 |
| Direct labour hours | 84,000 | 154,000 | - | - | - |
| Number of direct employees | 44 | 82 | - | - | - |

Rent includes an amount of €18,000 for the warehouse in which the Stores department operates.

The costs of the service departments are allocated to the other departments as follows:

| | **Cutting** | **Assembly** | **Stores** | **Maintenance** |
|---|---|---|---|---|
| Canteen | 40% | 40% | 10% | 10% |
| Stores | 50% | 40% | | 10% |
| Maintenance | 60% | 40% | | |

The actual results for the year ended 31 December 2015 were as follows:

| | **Cutting** | **Assembly** |
|---|---|---|
| Total overheads – € | 756,450 | 672,325 |
| Machine hours | 162,200 | 36,432 |
| Labour hours | 80,000 | 157,000 |

**Required:**

**A.** Calculate the budgeted overhead recovery rates (correct to 2 decimal places) for the year ended 31 December 2015 using both the machine hour rate and the labour hour rate for each production department. **(12 marks)**

**B.** Determine the most appropriate overhead recovery rate for each production department, and explain your decision. **(4 marks)**

**C.** Calculate the amount of over/under absorbed overheads for each production department. **(6 marks)**

**D.** Briefly explain two factors which give rise to over/under absorption of overheads. **(4 marks)**