MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2023 FIRST SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	I
DATE:	4th May 2023
TIME:	9:00 a.m. to 12:05 p.m.

This paper contains **THREE** sections. Follow the instructions below.

Section A
Answer all **FIVE** questions from this section. Each question carries 4 marks.

Section B
Answer question 6. **This question is compulsory** and carries 30 marks.

Section C
Answer any **TWO** questions from this section. Each question carries 25 marks.

You must show the working leading up to your answers.
Candidates may only use non-programmable calculators in this examination.

SECTION A

Answer all FIVE questions in this section. Each question carries 4 marks.

1. Enola works for a leading insurance company. The company is in the process of going public and seeking a listing. Explain to Enola what this process means for the company, highlighting **TWO** advantages and **TWO** disadvantages for the company. (4)

2. The credit balances in a trial balance include Reserves and Provisions. Explain the difference between a Reserve and a Provision. Provide **ONE** example of **each** and describe the underlying transactions. (4)

3. Sherlock was reading an accounting textbook, and was very impressed with the list of concepts that are applied. He realises that the accruals concept and the going concern concept are fundamental for the preparation of a set of financial statements. Explain these **TWO** concepts and provide **TWO** examples to highlight why and how they are important during the preparation of financial statements. (4)

4. The objective of financial statements is to provide information that is useful for decision making by various users including investors, lenders and other creditors. Describe **FOUR** qualitative characteristics that the information included in financial statements should have in order to be suitable for decision-making by such third parties. (4)

5. The continued success of an organisation depends on the ability to generate profits, and also on the availability of liquid resources.
   (a) Distinguish between profitability and liquidity. (2)
   (b) Describe **TWO** ratios that can be used to measure the profitability of a company and **TWO** ratios to assess its liquidity. (2)

(Total: 20 marks)

Questions continue on next page.

SECTION B
Answer Question 6 in this section. This question is compulsory and carries 30 marks.

6. Boom and All-Son Ltd manufactures high-end sound engineering equipment. The following comprises its trial balance for the year ended 31 December 2022. As financial controller, you are currently preparing the annual financial statements for internal use.

	DR	CR
	€	**€**
Land (including Head Office – Eur 1,000,000)	3,056,900	-
Buildings – at cost (including Head Office – Eur 200,000)	2,000,000	
Buildings – allowance for depreciation		160,000
Proprietary software	1,750,000	
Proprietary software – allowance for depreciation		45,000
Motor vehicles - at cost	21,000	
Motor Vehicles – allowance for depreciation		14,000
Inventory	1,125,000	
Research and development costs	200,000	
Trade receivables	87,775	
Allowance for doubtful debts		3,600
Bank balance	1,200,000	
Trade payables		798,200
Ordinary share capital		2,900,000
Retained earnings		1,788,000
Sales		5,050,000
Purchases	2,272,500	
Water & electricity	113,625	
Advertising costs	55,000	
Wages and salaries	280,000	
Finance costs	5,000	
Server maintenance costs	540,000	
Carriage inwards	40,000	
Carriage outwards	12,000	
Bank Loan (3%)		2,000,000
	12,758,800	**12,758,800**

Further information:

a) The value of the closing inventory was €950,000. This includes goods, costing €125,000, specifically targeted to a client in Eastria. As a result of an ongoing geopolitical situation, due to sanctions prohibiting the sale of goods to Eastria, your marketing manager informs you that this specific inventory is unsaleable. Due to region-locking constraints, although their sales price would have been that of €325,500, the marketing manager informs you that they could still be sold for parts for €40,000.

b) Research and development costs incurred and paid for in 2022 relate to a new product to be launched in 2024. It is too early to establish the feasibility of this new product. The research done to date is more of an exploratory nature.

c) The directors have resolved to adopt IAS 16's revaluation model for the company's land and buildings. However, only the value of the company's iconic Head Office resulted in being substantially different from its carrying value. These premises were originally bought for €1,200,000 (€1m included with Land and €0.2m included with Buildings). The accumulated depreciation on the Head Office building on 1 January 2022 stood at €50,000.
Due to its remarkable location and historic value, the Head Office premises was revalued on 31 December 2022 to €1,650,000 by a professional architect. This is the first time that the Head Office premises have been revalued.

d) It is the company's accounting policy to allow for depreciation/amortization as follows:

Non-Current Asset	**Depreciation method**	**Depreciation rate**
Proprietary software	Straight Line Method	5%
Buildings	Straight Line Method	1%
Motor vehicles	Reducing Balance Method	20%

A full year's depreciation is allowed for in the year of acquisition and none is provided in the year of disposal. No allowance for the depreciation for the year 2022 on any non-current asset has been made so far.

e) A credit risk analysis of receivables identified balances amounting to €8,774, the recovery of which is doubtful.

f) As at 31 December 2022, a performance bonus totalling €190,000 was still unpaid to the employees. Furthermore, server maintenance expenses were prepaid by €30,000 per month up to June 2023.

g) The bank loan was drawn down on 1 April 2022. Annual interest is payable in arrears.

Required:

A. Prepare the Statement of Profit or Loss for the year ended 31 December 2022. (14)

B. Prepare the Statement of Changes in Equity for the year ended 31 December 2022. (3)

C. Prepare the Statement of Financial Position at 31 December 2022. (13)

(Total: 30 marks)

Please turn the page.

SECTION C

Answer any TWO questions from this section. Each question carries 25 marks.

7. Fairway Engineering plc extracted the following trial balance on 31 March 2023:

		€	€
Ordinary share capital			300,000
Share premium			52,000
Retained earnings			12,600
Sales			728,000
Purchases of raw materials		156,000	
Purchases of loose tools		8,400	
Direct factory wages		146,000	
Hire of special machinery		12,200	
Supervisors' wages		28,500	
Maintenance of machinery		7,400	
Electricity		15,300	
Warehouse rent		14,200	
Insurance		8,600	
Salaries – Administrative staff		32,800	
Salaries – Sales force		48,500	
Administration expenses		17,700	
Selling and distribution expenses		21,600	
Motor Vehicles/depreciation allowance		84,000	26,100
Buildings/depreciation allowance		200,000	48,500
Plant/depreciation allowance		228,000	38,000
Office Equipment/depreciation allowance		58,600	14,800
Inventories:	Loose Tools	14,750	
	Finished Goods	37,950	
	Work in Progress	14,100	
	Raw Material	15,600	
Carriage in		74,500	
Trade receivables/payables		20,800	18,050
Discounts allowed/received		18,500	9,600
Bank			32,900
Provision for unrealised profit			3,450
		1,284,000	1,284,000

Other information on 31 March 2023:

a) It is company policy to transfer manufactured goods to trading at cost plus 10%.

b) Inventories on 31 March 2023:

	€
Raw materials	54,600
Work-in-progress	52,580
Finished Goods	70,400
Loose Tools	19,000

c) Depreciation is to be charged as follows:

Buildings	5% on cost
Plant	10% on cost
Motor Vehicles	40% on written down value
Office Equipment	25% on cost

d) Two weeks' wages were still due as at 31 March 2023. The amounts shown in the trial balance, for both factory workers and supervisors, are for 50 weeks of wages. The cost of wages accrues evenly throughout the year.

e) Warehouse rent and insurance were prepaid by €5,600 and €5,400, respectively, on 31 March 2023.

f) Administration expenses still due amounted to €5,200 on 31 March 2023.

g) Apportion the following costs as shown:

	Manufacturing	**Profit or Loss**
Insurance	80%	20%
Electricity	60%	40%
Warehouse rent	50%	50%
Motor vehicles depreciation	25%	75%

Required:

For Fairway Engineering plc, prepare the following for the year ended 31 March 2023:

A. The Provision for Unrealized Profit Account and the Loose Tools Account. (5)

B. The Manufacturing Account. (12)

C. The Statement of Profit or Loss. (8)

(Total: 25 marks)

Please turn the page.

8. The following is the Statement of Financial Position of Sue-ber Ltd, a ride-share company, as at 31 March 2023, with comparative figures:

Statement of Financial Position as at:

	31 March 2023		31 March 2022	
	€	**€**	**€**	**€**
Non-Current Assets:				
Garage premises		811,000		174,550
Motor vehicles		142,596		56,000
Office furniture		42,000		10,500
		995,596		241,050
Current Assets:				
Inventories	4,500		--	
Trade receivables	43,000		45,000	
Other receivables	15,000		8,252	
Cash and Cash Equivalents	18,925		90,000	
		81,425		143,252
TOTAL ASSETS		1,077,021		384,302
EQUITY AND LIABILITIES				
Ordinary share capital		200,000		200,000
Retained Earnings		105,000		17,800
		305,000		217,800
Non-Current Liabilities:				
Bank Loan 3%		700,000		--
Bank Loan 0.5%		--		130,000
Current Liabilities:				
Trade payables	61,521		35,852	
Interest Payable	10,500		650	
Total Current Liabilities		72,021		36,502
TOTAL EQUITY AND LIABILITIES		1,077,021		384,302

The following information is available in respect of the year ended 31 March 2023:

a) During the year, the company acquired a new garage, a fleet of motor vehicles and some office equipment.
   i) The new garage cost €650,000.
   ii) The new motor vehicles cost €150,000. These were part-funded by the proceeds of €65,000 from selling motor vehicles originally costing €80,000, which vehicles had been owned by the company for the past four years and depreciated at 15% reducing balance. A full year's depreciation is charged in the year of acquisition and none in the year of disposal.
   iii) The new office equipment cost €43,500.

b) During the year ended 31 March 2023, Sue-ber Ltd started selling food and drink items on longer-haul rides. The inventory relates to this activity.

c) To help finance the expansion, on 1 April 2022, the company obtained a new bank loan of €700,000, bearing 3% interest annually. Part of the proceeds were applied to repay the existing loan of €130,000 and outstanding interest.

d) Sue-ber Ltd paid a dividend of €0.10 per share during the year.

Required:

A. Prepare a Statement of Cash Flows for Sue-ber Ltd for the year ended 31 March 2023. (20)

B. Sue-ber Ltd has decided to finance its expansion with debt financing.

  I. Describe **ONE** advantage and **ONE** disadvantage of debt financing; (2)

  II. Mention another method of financing the company could have used; (1)

  III. Identify **ONE** advantage and **ONE** disadvantage of the alternative financing method that you have mentioned in (II) above. (2)

(Total: 25 marks)

9. Spratt operates a small business concern in the fishing trade. Spratt files most of his invoices and records receipts and payments, but does not keep proper accounting records. He contacts you to help him put his books in order for 2022 and provides you with the following information:

a) Spratt's bank summary for the twelve months ended 31 December 2022:

	€		€
Opening Balance	6,800	Purchases	163,000
Trade receivables	185,200	Rent	16,500
Loan	80,000	Electricity	6,400
		Insurance	8,190
		Drawings	8,600
		Fixtures	14,200
		Sundries	3,200
		Salesgirl's commission	3,640

b) Spratt's transactions are mostly carried out through the bank, but before depositing his takings, he paid the following expenses:

  i) Weekly wages of €260 to the salesgirl;
  ii) The purchase of a domestic appliance for €780 for his private residence; and
  iii) An average of €25 weekly for sundry expenses.

Sometimes, Spratt took some cash for personal use, but did not keep any record of this.

c) Other details relating to trade receivables and payables included:

  i) Returns from customers amounted to €6,200 while returns out were €4,600;
  ii) Discounts allowed totalled €8,500 and those received €11,100;
  iii) Bad debts amounted to €5,250;
  iv) A debt of €800, written off during the previous period, was recovered;
  v) A customer, who also happened to be a supplier, had a debit balance of €2,200 in the sales ledger account. This was set off against the outstanding balance in the purchases ledger account.

Please turn the page.

d) The salesgirl is paid a commission of 2% on net sales, after deducting her commission. The commission is paid one month after the end of the year.

e) Spratt's list of assets and liabilities on 1 January of the two years 2022 and 2023 showed the following:

	2022	**2023**
	€	**€**
Inventory	10,000	13,000
Trade receivables	6,300	12,400
Trade payables	10,200	8,760
Rent owing	3,800	-
Rent prepaid	--	2,100
Insurance prepaid	1,600	850
Electricity due	740	1,120
Salesgirl commission due	3,640	?
Cash	565	275

f) Spratt has maintained a uniform gross profit margin of 25%.

g) During the year, he had donated goods costing €200 to the Young Anglers' Club.

Required:

A. Prepare the cash account, the trade payables control account and the trade receivables control account. (15)

B. Prepare the ledger accounts for Rent, Electricity, Insurance, and Salesgirl Commission, including balances to be transferred to the Statement of Profit or Loss and balances carried forward. (5)

C. Explain **TWO** benefits of keeping control accounts. (5)

(Total: 25 marks)

L-Università ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2023 FIRST SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	II
DATE:	5th May 2023
TIME:	9:00 a.m. to 12:05 p.m.

This paper contains **THREE** sections. Follow the instructions below.
Section A
Answer all **FIVE** questions in this section. Each question carries 4 marks.
Section B
Answer question 6. **This question is compulsory** and carries 30 marks.
Section C
Answer any **TWO** questions from this section. Each question carries 25 marks.

You must show the working leading up to your answers.
Candidates may only use non-programmable calculators in this examination.

SECTION A
Answer all FIVE questions in this section. This section carries a total of 20 marks.

1. Overhead absorption rates are normally based on activity linked to labour or machine hours and can be calculated as a blanket rate or for each production department.
   a) Describe how a blanket rate is calculated. (1)
   b) Explain **ONE** advantage of using a pre-determined overhead absorption rate for each department. (1)
   c) What are over/under absorbed overheads? Why do they occur? (2)

2. Distinguish between relevant and irrelevant costs in decision making. Give **TWO** examples of relevant costs and **TWO** examples of irrelevant costs. (4)

3. a) Briefly describe the term 'Economic Order Quantity', clearly indicating how it is measured. (1)
   b) Describe **THREE** stock levels that can be calculated, and explain why they are useful for inventory control. (3)

4. Process costing is a costing method used for mass production of identical units.
   a) Provide **TWO** examples of industries which could use process costing. (1)
   b) Identify the difference between normal and abnormal losses, including their respective accounting treatment. (2)
   c) How is the scrap value of process losses accounted for? (1)

5. 'Margin of Safety' refers to the amount by which budgeted sales exceed the break-even point.
   a) Indicate the potential effect that a narrow margin of safety may have on profitability. (2)
   b) Describe **TWO** ways how the 'Margin of Safety' can be increased. (2)

(Total: 20 marks)

Questions continue on next page.

SECTION B
Answer Question 6 in this section. This question is compulsory and carries 30 marks.

6. Rest Ltd has been in operation for the last two years producing upholstered armchairs. The shareholders together with the directors of Rest Ltd, are closely monitoring the global market due to shifting prices. They have approached you, as the cost accountant of the company, to provide your input at the forthcoming board meeting on the forecasted cash position of the company for the first quarter of 2024.

   The following is the projected Statement of Financial Position of Rest Ltd as at 31 December 2023:

	€	€	€
Non-Current Assets:	**Cost**	**Dep.**	**NBV**
Property, Plant and Equipment	120,000	24,000	96,000
Current Assets:			
Inventories - Raw Materials		75,000	
Inventories - Finished Goods		46,200	
Trade receivables		185,000	
Other receivables		220	
			306,420
Total Assets			**402,420**
Equity:			
Ordinary share capital			60,000
Retained earnings			265,720
			325,720
Current Liabilities:			
Trade payables			74,200
Bank overdraft			2,500
			76,700
Total Equity and Liabilities			**402,420**

   The following information has been made available:

a) The projected selling price for 2024 is €250 per upholstered armchair.

b) The forecast production and sales in units for 2024 are as follows:

	January	**February**	**March**
Production – units	2,200	2,700	3,200
Sales – units	1,750	2,400	2,950

c) Sales to retailers make up 40% of total sales. The credit terms set during 2023 shall be retained during 2024, that is, 30% of the sales revenue to retailers will be received during the month the upholstered armchairs are sold, whilst the other 70% will be received during the following month. The remainder of sales are attributed to individual customers who shall pay by cash, and are entitled to a 5% discount.

d) Inventory of finished goods is valued using the first-in first-out method of valuation.

e) It has been communicated by the production department that the variable production cost per unit for the first quarter of 2024 is projected to be €1.75 higher when compared to the last quarter of 2023, and is made up as follows:

Variable Production Cost per unit for 2024	**€**
Material	85
Direct Labour	70
Production Overhead	10
Total	165

f) Purchases of raw materials for the first four months of 2024 are forecasted by the production department to be as follows:

January	**February**	**March**	**April**
€240,800	€400,300	€410,880	€440,600

Suppliers have extended the 2023 credit terms to 2024. Hence, 60% of purchases are settled in the month in which they are made, and the remaining 40% shall be paid in the month following that of purchase. The trade payables of €74,200 shown in the projected statement of financial position as at 31 December 2023 are amounts due to suppliers of raw materials.

g) All other variable production costs (except for material) are paid for in the same month when incurred.

h) During the first week of every January, Rest Ltd is required to pay in advance the rental expense of €24,000 which covers the rental cost for that year.

i) Rest Ltd plans to introduce new designs and hence it will invest in new machinery. The new machine shall cost €10,000 and it will be delivered in January 2024. Rest Ltd is required to pay 50% on delivery and settle the remaining balance in two equal instalments in February and March 2024.

j) Property, plant and equipment are depreciated over a period of 10 years but the new machine is to be depreciated over a four-year period. The residual value of all the assets shall be deemed to be nil.

k) To increase its market share, in April 2023, Rest Ltd entered into an agreement with an advertising company. The agreement runs for 12 months for the total annual value of €2,640, payable monthly in advance. The other receivable of €220 shown in the projected statement of financial position as at 31 December 2023 relates to prepaid advertising.

l) Other administrative expenses (excluding rent, advertising expenses and depreciation) are projected to amount to €5,200 per month, and are settled in the month in which they are incurred.

Required:

A. Prepare a monthly cash budget for the three months ending 31 March 2024. (14)

B. Prepare a budgeted Statement of Profit or Loss for the three months ending 31 March 2024 and a budgeted Statement of Financial Position as at that date. (16)

(Total: 30 marks)

Please turn the page.

SECTION C

Answer any TWO questions from this section. Each question carries 25 marks.

7. Young Pharma Limited is a pharmaceutical company with its operational hub based in Malta and Head Office in Spain. The company focuses on producing three types of anti-aging products, namely Pharma Cream, Pharma Gel and Pharma Serum. The company's directors in Malta have received the following budgeted figures for the last quarter of 2023:

	Pharma Cream	**Pharma Gel**	**Pharma Serum**
Sales - units	22,500	9,000	18,000
	€	**€**	**€**
Sales	450,000	144,000	432,000
Variable cost of sales	270,000	108,000	252,000
Fixed costs shared	135,000	45,000	121,500

In the production of Pharma's anti-aging products, the most complex ingredient is the Vitamin A compounds. Head Office informed the Malta operational team that the supply for the next period of the complex ingredient will be limited to 600 litres. The below is the estimated amount of ingredient used to produce each anti-aging product:

Pharma Cream	18 ml per unit
Pharma Gel	12.5 ml per unit
Pharma Serum	10.25 ml per unit

Required:

A. Assuming that there is **no** limiting factor, calculate the expected profit in Quarter 4 of 2023 with the budgeted figures, analysed by **each** product and in total. (3)

B. Calculate how the company can maximise profits by determining the optimum quantities to be produced given the limited amount of ingredient available. (10)

C. Market research performed by Head Office showed that there is an increased interest for a powder based anti-aging cream. Management is considering introducing Pharma Powder and initial studies show that to produce one unit of Pharma Powder, only 5ml per unit of the complex ingredient would be required. The company is expecting to sell 20,000 units of the new product at €30/unit with a variable cost to produce of €12.50/unit.
   - I. Calculate the total profit made by the company if it had to produce Pharma Powder along with the other three products in the market. Assume that there are **no** limiting factors and that fixed costs are **not** affected. (3)
   - II. Assume that one year later, Head office manages to increase the availability of the complex ingredient by 200 litres. Recalculate how the company can maximise profits with the four products in the market. It is estimated that fixed costs shall increase by 20%. (9)

(Total: 25 marks)

8. Innovative Limited, a company recently established in Malta, manufactures, assembles, and sells a high-quality product called "FRESH" to other companies in Malta. Budgeted sales and production for April 2023 is 1,000 units at a profit margin of 25%.

The standard cost figures for the month are as follows:

Material Aye per unit	15 kg at a price of €3 per kg
Material Bee per unit	5 kg at a price of €6 per kg
Direct labour per unit	16 hours at €9 per hour
Fixed production overheads	150% of direct labour cost

Unfortunately, the market showed lack of interest in the product and, in April 2023, the actual orders received amounted to 720 units. These were sold at a price which was 5% below the budgeted sales price.

The actual costs incurred during April 2023 were:

Material Aye	10,800 kg at a price of €1.95 per kg
Material Bee	3,600 kg at a price of €4.20 per kg
Direct labour	11,530 hours at €9.50 per hour
Fixed production overheads	€200,000

Required:

A. Prepare a statement showing the Budgeted Profit and the Actual Profit for the month of April 2023. (8)

B. Analyse the difference between the Budgeted Profit and Actual Profit by:
   i. Sales, analysed into price and volume. (2)
   ii. Total material costs, analysed into price variance and usage variance for **both** materials. (6)
   iii. Total labour costs, analysed into rate variance and efficiency variance. (3)
   iv. Total fixed overhead, analysed into expenditure variance and volume variance. (3)

C. Explain the purpose of variance analysis and its importance to a business. (3)

(Total: 25 marks)

9. In the past year, Joseph Mamo started providing turnkey services. He managed to employ 15 individuals who were previously providing services on a self-employed basis. Three of these employees are more experienced than the others, and hold additional supervisory responsibilities.

   Joseph Mamo is concerned about the pricing of his services. Joseph Mamo is charging clients on a price that he deems "fair and reasonable" for the service he provides. However, he wants to ensure that the rates that he is quoting to his clients are sufficient to cover the cost of his labour and any other overheads incurred in providing these services. He has contacted you to assist him and has provided you with the following financial information:

a) Annual basic gross wages (excluding yearly bonuses and allowances): €15,000 per employee.

b) Supervisory allowance: €2,000 per employee with supervisory responsibilities.

c) Annual year-end bonus: 10% of annual basic gross wages excluding bonuses and allowances per employee.

d) Annual vacation leave: 25 days.

e) National insurance contribution: 10% of the basic gross wage payable by Joseph Mamo as the employer, and another 10% of the basic gross wage payable by the employee.

f) Joseph Mamo pays monthly health insurance costing €150 per employee.

g) Employees work a 40-hour week, excluding weekends and public holidays (10 days per annum).

h) Joseph Mamo estimates that, on average, each employee is sick for 6 days per annum.

Question continues on next page.

i) His employees use their own private vehicles to provide their services and Joseph Mamo pays them €100 monthly each to cover fuel and insurance.

j) During the first day of operations, Joseph Mamo had provided **each** employee with safety equipment, toolbox and other equipment costing €1,500. He believes that these will be used for a maximum of 5 years.

k) During the first year of operations, Joseph Mamo also incurred the following costs:
- Secretary salary working on a part-time basis: €5,000
- Insurance costs: €2,200
- Mobile and data usage costs: €350
- Accountancy and audit fees: €2,500

Required:

A. What is the minimum labour hourly rate that Joseph Mamo is to charge his clients for the services provided, to cover **only** the cost of labour (including the supervisory allowance)? (13)

B. Calculate the labour recovery rate that Joseph Mamo should charge to cover **ALL** his costs and make up an annual profit of €30,000. Assume that employees are kept fully occupied during the calendar year. (12)

(Total: 25 marks)