L-Università ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2024 FIRST SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	I
DATE:	25th April 2024
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 workings 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. Calvin has received a purchase invoice for goods received. The invoice states that the retail price of the goods is €2,200, but Calvin is entitled to a trade discount of 20%. Furthermore, he is entitled to a 5% cash discount if he settles the invoice before the expiry of the agreed credit terms. Calvin is not sure which amount he must record as purchases. Advise Calvin on the matter. (4)

2. Harriet sells goods at a gross profit mark-up of 40%. At the end of her financial year, the value of the inventory at her shop is €18,000. Sales invoices totaling €10,800 relate to goods sold on a sale-or-return basis. The clients have confirmed that half of these goods have not been sold. Advise Harriet on the calculation of her inventory at the end of the year. (4)

3. Donatti is looking for a new accounting system for his business. Some of the specifications at hand mention books of prime entry. He is not sure what these are and what their purpose is. Explain to Donatti what books of prime entry are. Provide **THREE** examples of such books and describe the purpose of **each**. (4)

4. Wakely is an excellent marketing manager but is hopeless with numbers. He feels lost when his accountant starts talking in percentages. For example, he is not sure what the difference is between mark-up and margin, since they both relate to gross profit at the end of the day. More importantly, he is not sure how his commission is calculated because his employment agreement states that he is entitled to "10% commission on net profit after charging commission". Clarify these **TWO** issues to Wakely given that the business registered sales of €100,000 and net profit of €50,000 before his commission. (4)

Questions continue on the next page.

5. Ms Frask has invested some money in the shares of a public company. The company has just published its financial results and will not be paying out a dividend. Ms Frask assessed the financial statements and noticed that the company's reserves are quite substantial and cannot understand why these reserves are not distributed as dividends. Explain to Ms Frask:

   (a) the difference between capital and revenue reserves; (1)

   (b) the requirements for the distribution of such reserves as dividends to shareholders; and (1)

   (c) what factors are taken into consideration when a company decides whether to pay a dividend or not. (2)

(Total: 20 marks)

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

6. Midnights Limited, a retailer of party games and supplies, is currently closing its books for the financial year ended 31 March 2024. As the financial controller, you have been provided with the following trial balance:

	DR €	CR €
Freehold Premises (Cost/Accumulated Dep'n)	580,000	348,000
Office Furniture and fittings (Cost/Accumulated Dep'n)	120,000	48,000
Motor Vehicles (Cost/Accumulated Dep'n)	89,000	42,540
Development costs	170,000	
Inventory	180,000	
Trade receivables	202,572	
Allowance for expected credit losses (doubtful debts)		4,200
Cash at bank	2,341,250	
Trade Payables		334,000
3.75% Loan		500,000
Ordinary share capital (€1 Nominal)		1,000,000
VAT Liability		100,000
Retained earnings		390,000
Sales		2,225,000
Purchases	890,000	
Water and electricity	24,920	
Legal fees	5,000	
Sales and marketing costs	94,440	
Loan interest paid	8,750	
Wages and salaries	125,000	
Directors' remuneration	15,000	
Administration expenses	124,000	
Motor vehicles repairs	21,808	
	4,991,740	**4,991,740**

Further information:

a) The following transactions made during the last week of March have not been recorded:
   i. Credit purchases amounting to €64,900 (inclusive of 18% VAT).
   ii. Credit sales of €118,000 (inclusive of 18% VAT).
   Ignore any possible VAT implications for further information provided below.

b) During the year, the company had been looking into market trends and the product director recommended the development of a theme-party app: 'Party-Hero'. Market research costs incurred during the year, amounting to €25,000, were invoiced in April 2024. Development costs, also invoiced in April but incurred during the year, amounted to €35,000. The development costs in the trial balance were capitalised on 1 April 2023. Development costs are amortised on a full-year basis over 5 years.

c) The value of the closing inventory was €95,000.

d) The company depreciates freehold premises at 3% per annum, whilst office furniture and fittings are depreciated over a useful life of 10 years, both on a straight line basis. Motor vehicles are depreciated using the reducing balance method at 15% per annum.

e) Freehold premises were revalued to €650,000 as at the end of the year.

f) The loan shown in the trial balance was re-financed mid-way through the year. The original amount and maturity were retained but the rate was increased from 3.5% to 3.75% p.a. The interest from October 2023 to the year-end has not been paid.

g) Legal fees of €2,500 included in the above trial balance pertained to services rendered after March 2024; whilst €2,000 worth of Directors' remuneration relating to the financial year ended were still outstanding as at year end.

h) As at 31 March 2024, information about a customer getting injured whilst playing 'Karma' a party game designed and sold by the company reached the company's lawyers. The claimant is asking for €5,000 in damages. At present the client has not pressed charges and the matter has not yet reached litigation stage.

i) The allowance for expected credit losses was assessed and deemed to be sufficient as at year end.

Required:

A. Prepare a Statement of Profit or Loss for the year ended 31 March 2024. (15)

B. Prepare a Statement of Financial Position as at 31 March 2024. (12)

C. Prepare the Statement of Changes in Equity for the year ended 31 March 2024. (3)

(Note that these financial statements are not intended for publication purposes.)

(Total: 30 marks)

Please turn the page.

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

7. Boson Limited manufactures its trademark all-purpose glue, the 'Gluon'.
It is currently closing off its books for the financial year and has prepared the following trial balance as at 31 December 2023:

Boson Limited
Trial Balance as at 31 December 2023

	DR	CR
Inventory:	**€**	**€**
Raw materials	13,000	
Finished goods	21,700	
Work-in-progress	7,800	
Provision for unrealised profit		6,200
Purchases raw materials	470,000	
Factory wages	305,500	
Sales		1,692,000
Carriage inwards	121,000	
Carriage outwards	157,300	
Water & electricity	118,580	
Machinery repairs and maintenance	29,645	
Returns	3,740	2,200
Discounts	15,300	9,420
Rent	29,000	
Administration expenses	21,000	
Plant and Machinery insurance	5,000	
Administrative and sales staff salaries	198,590	
Plant cost/ Accumulated depreciation	990,000	495,000
Machinery cost/Accumulated depreciation	436,000	164,000
Motor vehicles cost/Accumulated depreciation	75,000	46,059
Trade receivables/Trade payables	310,699	89,301
Share capital (€1 nominal value per share)		800,000
5.0% Loan		550,000
Retained profits		661,674
Bank	1,187,000	
	4,515,854	**4,515,854**

You have been provided with the following additional information:

a) As at 31 December 2023, the following elements of inventory were valued at cost as follows:

	€
Raw materials:	20,000
Finished goods:	15,000
Work-in-progress:	9,000

b) Finished goods are transferred to the trading account at a factory profit of 40% on a cost-plus basis.

c) Water and electricity is apportioned between factory and office using an 80%-20% split.

d) Factory wages amounting to €9,000 were unpaid at year end. Factory wages are split 60%-40% between the wages directly related to the manufacturing process itself and other factory staff costs not directly involved to the manufacturing process.

e) Prepaid rent amounted to €6,000. Rent pertains to commercial premises and is not related with the manufacturing process.

f) Depreciation is to be allowed for as follows:

Plant:	5%, Straight line basis
Machinery:	12.5%, Straight line basis
Motor Vehicles:	15% Reducing Balance Method

g) It is estimated that Motor vehicles are utilised at 80% for the transport of raw materials, whilst the remainder is utilised for the transport of finished goods.

h) The loan was drawn down on 1 March 2023.

Required:

A. Prepare the Provision for Unrealised Profit Account for the year ended 31 December 2023. (2)

B. Prepare the Manufacturing account of Boson Limited for the year ended 31 December 2023, clearly showing the Prime Cost and the transfer to the trading account at transfer prices. (10)

C. Prepare the Statement of Profit or Loss for the year ended 31 December 2023. (9)

D. During the year, the manufacturing director of Boson Limited highlighted that machinery bought last year to check for the quality of the glue has been rendered obsolete in the wake of available technologies making use of artificial intelligence to detect impurities in the glue molecular structure. Explain the accounting implications of this information. (4)

(Total: 25 marks)

Please turn the page.

8. The following is the Statement of Financial Position of Clarence plc for the year ended 31 December 2023, together with Profit or Loss extracts and comparative figures for the prior year:

	31 Dec 2023	31 Dec 2022
	€	€
Statement of Financial Position		
Assets:		
Non-current Assets	175,000	160,000
Inventories	40,000	21,000
Trade receivables	18,760	24,000
Bank	10,100	0
	243,860	**205,000**
Equity:		
Ordinary Share Capital	140,000	120,000
Share premium	25,000	20,000
Retained earnings	45,460	31,900
	210,460	171,900
Liabilities:		
Trade payables	19,000	16,000
Accruals	14,400	12,500
Bank Overdraft	0	4,600
	33,400	33,100
	243,860	**205,000**
Statement of Profit or Loss (extract)		
Gross Profit	135,860	124,200
Expenses	102,300	92,300
Net Profit	**33,560**	**31,900**

Notes:

a) The share issue was made at a premium. There was no bonus issue. A dividend was paid during 2023.

b) Expenses include bank overdraft interest of €1,000 for 2022 and €300 for 2023. In both years, the amounts were accrued as at year end because they were paid in the following year.

c) Movements (at original cost) in Non-current assets were as follows:

	€
Opening balances	175,000
Additions	35,000
Disposals	12,600

d) The assets sold realised €3,800, resulting in a gain on disposal of €1,000.

Required:

A. Prepare the Cashflow Statement of Clarence plc for the year ended 31 December 2023. (21)

B. Explain **TWO** factors that create differences between reported profit and increase/decrease in cash balances. (4)

(Total: 25 marks)

9. The management of Baytown plc presented the following extracts from the financial statements for the two years ended 31 December 2023 and 2022:

	31 December 2023		31 December 2022	
	€	**€**	**€**	**€**
Statement of Financial Position				
Assets:				
Non-current assets	193,000		183,000	
		193,000		183,000
Current Assets:				
Inventory	40,000		25,000	
Trade receivables	76,000		45,000	
Bank/Cash	2,000		38,000	
		118,000		108,000
		311,000		**291,000**
Equity:				
Share capital (nominal value €0.50 per share)	120,000		100,000	
Retained earnings	91,000		46,000	
		211,000		146,000
Bank Loan 8%		50,000		100,000
Current liabilities:				
Trade payables	42,000		30,000	
Accruals	8,000		15,000	
		50,000		45,000
		311,000		**291,000**
Statement of Profit or Loss				
Credit sales	382,000		266,000	
Less Sales returns	(22,000)		(16,000)	
Net sales		360,000		250,000
Opening inventory	25,000		35,000	
Credit purchases	209,000		140,000	
Less Closing inventory	(40,000)		(25,000)	
		(194,000)		(150,000)
Gross profit		166,000		100,000
Operating expenses	(102,000)		(57,000)	
Loan interest	(4,000)		(8,000)	
		(106,000)		(65,000)
Net Profit		**60,000**		**35,000**

Statement of Changes in Equity (extract showing Retained earnings only)

	2023	2022
Retained earnings b/f	46,000	23,000
Add profit for year	60,000	35,000
Less Dividends paid	(15,000)	(12,000)
Retained earnings c/f	**91,000**	**46,000**

Please turn the page.

Required:

A. Compute the following ratios for the **TWO** years ended 31 December 2023 and 2022:

i)	Gross Profit Margin;	(1)
ii)	Net Profit Margin;	(2)
iii)	Return on Capital Employed (ROCE);	(2)
iv)	Current Asset Ratio;	(2)
v)	Acid Test Ratio;	(2)
vi)	Inventory Turnover;	(2)
vii)	Collection period of receivables;	(2)
viii)	Payment period of payables; and	(2)
ix)	Interest cover.	(2)

B. Comment on the changes in profitability and liquidity of Baytown plc. (4)

C. Ratio analysis is a very useful tool to assess a company's performance, but it does have its limitations. Identify and explain **TWO** of these limitations. (4)

(Total: 25 marks)

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MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2024 FIRST SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	II
DATE:	26th April 2024
TIME:	4:00 p.m. to 7:05 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. Elizabeth is an accounts clerk in the costings department. At the end of every month, she requests data from the Human Resources department about the number of employees, the number of leavers and the number of joiners during the month. She inputs the data into the computer system and the labour turnover is automatically calculated. Elizabeth cannot understand why the management accountant scrutinizes the labour turnover results. Describe the labour turnover formula to Elizabeth and explain **TWO** possible consequences of a high rate of labour turnover. (4)

2. Madeline oversees the preparation of the monthly management accounts of one of the production departments in a large food processing plant. Process costing is used. Due to the nature of the materials used, losses of 5% of input materials are expected. Sometimes the actual losses are different from expected. Madeline has been asked to prepare a report to management that explains the accounting consequences of such losses. Assist Madeline in the preparation of the report, which is to include a description of the accounting treatment of normal losses and abnormal losses/gains; and the reasons for such accounting treatment.(4)

3. The company in which Amanda works as an accountant uses absorption costing in order to value its inventory. Her father, Walter, who is also an accountant with another firm, told her that his company uses marginal costing because it is more straightforward. Amanda is worried to put forward a different valuation method to management because it may affect reported profits. Discuss whether Amanda's concerns are justified by highlighting the difference between the two inventory valuation methods and the effect on reported profit. (4)

4. Mason Ltd produces three types of products, all using the same raw material. During 2023, Mason Ltd has found it difficult to import all raw materials required to satisfy its customers' demands. An alternative raw material is not available. Describe how Mason Ltd would decide on an adequate production plan that maximises its profits in such circumstances. (4)

Questions continue on the next page.

5. John is a management accountant. He carries out a variance analysis on a fortnightly basis. The Managing Director has asked John to stop carrying out this work because he thinks that it is pointless, based on the fact that the budget is only an estimate. Assist John in preparing some notes on the relevance of variance analysis. The notes are to include the reason why variances are calculated and how they are useful for management. Include **TWO** examples. (4)

(Total: 20 marks)

SECTION B

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

6. Timmy Galea commenced retail operations on 1 April 2024, investing the sum of €10,000 from his personal savings. In addition to these funds, Timmy has made a request to the bank to take out a loan amounting to €10,000 on a short-term basis. Timmy is requesting your assistance to establish the cash requirements of the new undertaking for the 3-month period ending 30 June 2024. The following information was made available for this purpose.

   To start operations, Timmy acquired the necessary non-current assets costing €18,000. The seller requested a cash deposit of 40% on delivery which took place on 1 April 2024. The other 60% has to be settled in three equal monthly instalments due at the end of every month, starting from May 2024. Depreciation on a straight-line basis at the rate of 10% per annum, on a pro-rata basis, should be applied to non-current assets. Non-current assets are deemed to have an immaterial value at the end of their expected useful life.

   To cover the sales projected for the months of April and May, the necessary goods were acquired at the beginning of April 2024. Thereafter, Timmy plans to maintain inventory levels at the end of every month to cover 80% of the sales projected for the following month. Timmy has been requested to settle half of the value of the goods purchased on delivery, whereas the remaining balance has to be settled in the month following the delivery.

   Timmy plans to sell the goods at a gross profit margin of 80%. Sales are projected to be as follows:

April	€ 2,000
May	€ 4,000
June	€ 7,000
July	€ 9,000

   Only 20% of the total sales shall be on a cash basis, which sales benefit from a 10% discount. 30% of the credit sales will be settled in the month following the sale, whilst the remaining balance is anticipated to be received two months after the sale takes place.

   Timmy's monthly drawings amount to €1,500, taken at the end of each month. Timmy has employed an assistant on a part-time basis, at a monthly gross wage of €1,000. The employee pays tax and national insurance at the rate of 15%. The employer's share of national insurance contribution amounts to 10% of gross wages. Net wages are paid on the last day of each month. The tax and the total national insurance contribution is due for settlement by the 15th of the month following that in which the wages are paid.

   Interest on the acquired loan and related bank charges are calculated to be in the region of €100 per month, payable at the beginning of the month following that in which they arise. Timmy anticipates that overheads necessary to keep operations going (excluding the depreciation charge) would amount to €500 per month. Payment of overheads is due for settlement in the month in which they are incurred.

Required:

A. A monthly Cash Budget for the three-month period ending 30 June 2024. (14)

B. The budgeted Statement of Profit or Loss for the three months ending 30 June 2024. (6)

C. The Statement of Financial Position as at 30 June 2024. (10)

(Total: 30 marks)

SECTION C

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

7. Trendy Ltd commenced trading twelve months ago. The company imports a specialised tablet case from an overseas supplier which it currently sells to various outlets in Malta. The case is made from post-consumer waste and innovative biodegradable plastics. On 1 January 2024, 2,000 tablet cases were held in inventory at a total cost of €72,000. The following information is available for the purchases made in the three-month period, January to March 2024:

Date	Units	Purchase Costs (excluding freight costs)
10 January	1,500	€49,500
28 January	2,000	€66,400
15 February	2,000	€67,000
26 February	5,000	€168,000
14 March	4,900	€164,640

Purchase costs include insurance of €1.00 per unit. Further costs incurred by the company on its purchases include freight costs which amount to 10% of the purchase costs shown in the table above.

The following sales were made during the three-month period at a constant selling price of €48.50 per unit:

Date	Units
15 January	2,100
3 February	3,100
7 March	4,000
30 March	3,900

Trendy Ltd uses the First In First Out (FIFO) method of valuing inventory but the management accountant is considering switching to the Weighted Average Cost (AVCO) method.

Required:

A. Calculate the value of closing inventory of tablet cases as at 31 March 2024 using the following methods of valuation on a perpetual basis:
   i) First In First Out (FIFO).
   ii) Weighted Average Cost (AVCO). (14)
   (The inventory value per unit should be calculated to the nearest 2 decimal places).

B. Calculate the gross profit for the 3-month period, January to March 2024, using **both** methods of inventory valuation calculated in part A. above. (4)

C. Using the answers obtained in parts A. and B., briefly explain the effects that **each** method of inventory valuation has on profit and on closing inventory valuation. (3)

D. Presently, Trendy Ltd is discussing with another foreign supplier to acquire leather backpacks to sell in the local market. The demand for these backpacks is expected to be 1,500 units in a three-month period. Each backpack has a purchase price of €100 and ordering costs are €450 per order placed. The annual holding cost of one backpack is 10% of its purchase price.
   Calculate the Economic Order Quantity (to the nearest backpack). (4)

(Total: 25 marks)

Please turn the page.

8. Sweet Home (SH) Ltd manufactures custom-designed home furniture and accessories for the local market. The company was set up eight years ago and demand for its products has increased significantly over the years.

SH Ltd has three production departments: Cutting, Assembly and Finishing. SH's management accountant provided the following budgeted information for year ending 31 December 2024:

Department	Production Overhead €	Labour Hours	Machine Hours
Cutting	117,520	1,130	2,938
Assembly	85,500	1,710	855
Finishing	125,500	6,275	2,510

The company has just received an order, logged as Job F246, from a regular client who requires a customised luxury piece of furniture. The following information is provided for Job F246:

Direct material
Wood – this will need to be bought in at a cost of €3,000. Additional delivery costs are estimated at €500.
Fabric – 12 metres of fabric are required. Since there will be some waste involved in the process, the company needs to purchase an extra 5% of the fabric required. Fabric costs €180 per metre.

Direct expenses €500

Direct labour hours
Cutting (at €12 per hour) 10 hours
Assembly (at €10.50 per hour) 15 hours
Finishing (at €10.75 per hour) 16 hours

Machine hours
Cutting 18 hours
Assembly 6 hours
Finishing 9 hours

Non-production costs 20% of prime cost

It is company policy to price all custom-made orders using a mark-up on total cost of 40%.

Required:

A. Calculate the budgeted overhead recovery rate for the **THREE** production departments based on:
   i) Labour hours
   ii) Machine hours (6)

B. Based on your answers in part A., determine the more appropriate overhead recovery rate for **each** production department. Give reasons for your answer. (3)

C. Compute the total cost of Job F246 and the price that the company will quote for the new customer order. (12)

D. Briefly explain **TWO** main differences between job costing and process costing. Mention **ONE** industry that uses job costing and **ONE** industry that uses process costing. (4)

(Total: 25 marks)

9. So-Gym Ltd manufactures high quality fitness mats made from sustainable materials. These mats tend to be non-slip, durable and moisture resistant. Due to the increasing number of gyms and fitness centres in Malta and Gozo, demand for these fitness mats has increased in recent years. The following information is available for the year ended 31 March 2024:

Production and sales of fitness mats		10,000
	€	**€**
Sales		675,000
Cost of sales		
Direct material (Note 1)	251,500	
Direct labour (Note 1)	81,900	
Production overheads (Note 2)	125,000	
		458,400
Gross profit		216,600
Administration costs (Note 3)	63,900	
Selling and distribution costs (Note 3)	49,500	113,400
Net Profit		103,200

Note 1: Both direct material and direct labour costs vary with the level of activity.

Note 2: The following information shows the production overheads at different levels of activity for the current year:

Number of fitness mats	**Production overheads (€)**
8,000	100,000
10,000	125,000
12,000	140,000

Note 3: The management accountant has analysed the cost behaviour of the administration and selling and distribution costs as follows:

	Variable element	**Fixed element**
Administration costs	0%	100%
Selling and distribution costs	40%	60%

Please turn the page.

Required:

A. For the year ended 31 March 2024, calculate:
   i) the variable costs per fitness mat and the total annual fixed costs; (9)
   ii) the contribution per fitness mat and the contribution/sales (C/S) ratio; (3)
   iii) the break-even point in units and in sales value; (2)
   iv) the margin of safety in units and in sales value. (3)

B. The company has just been informed by its supplier that the price of material will be increasing by 25% from 1 June 2024. The management of So-Gym Ltd is considering whether to continue making the mats internally or to start buying them from outside. A newly established company, Fit Grow Ltd, has offered to supply similar fitness mats at €45 per mat. The management accountant has confirmed that irrespective whether the fitness mats are produced internally or bought from Fit Grow Ltd, fixed production costs would still be incurred by the company.
   Using relevant calculations, determine whether So-Gym Ltd should continue to produce the fitness mats internally or buy them from the external supplier. (5)

C. Briefly discuss **THREE** non-financial factors which So-Gym Ltd should also consider when deciding whether to make the fitness mats internally or buy them from the external supplier. (3)

(Total: 25 marks)