MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

UNIVERSITY OF MALTA, MSIDA

MATRICULATION EXAMINATION
ADVANCED LEVEL
MAY 2017

SUBJECT:	ACCOUNTING
PAPER NUMBER:	I
DATE:	4th May 2017
TIME:	4.00 p.m. to 7.05 p.m.

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.

SECTION A

Answer ALL questions in this section. This section carries a total of 22 marks.

1. The financial statements are normally prepared on the assumption that the entity is a going concern. Describe the going concern concept. (3 marks)

2. Briefly highlight the differences between a public issue, a rights issue and a bonus issue of shares. (3 marks)

3. All errors and omissions must be dealt with but not all errors and omissions will prevent the trial balance from balancing. Identify and briefly describe by means of numerical examples, **TWO** errors that do not affect the trial balance. (4 marks)

4. a) Distinguish between capital reserves and revenue reserves. (2 marks)
   b) Describe **ONE** instance when the Companies Act requires the creation of a Capital Redemption Reserve. (2 marks)

5. a) Describe the difference between a provision and a contingent liability. (2 marks)
   b) How are provisions and contingent liabilities accounted for? (2 marks)

6. a) Identify **TWO** ratios that you would use in order to assess the efficiency of the operations of an entity. (1 mark)
   b) For each ratio identified in (a), explain how it is calculated and what it is measuring. (3 marks)

SECTION B

Answer Question 7 in this Section. This question is compulsory and carries 26 marks.

7. The following Trial Balance was extracted from the books of ABC Limited on 31 December 2016:

	€	€
Ordinary Share Capital (€0.25 per share)		1,500,000
Revaluation Reserve		305,000
Share Premium		45,000
6% Debentures 2020		450,000
Retained Earnings		428,200
Interim Ordinary Dividend paid	75,000	
Freehold Land	849,000	
Buildings	1,238,000	
Equipment	915,500	
Motor Vehicles	259,700	
Allowance for Depreciation:		
Buildings		162,300
Equipment		371,000
Motor Vehicles		83,700
Inventories as at 31 December 2015	133,400	
Trade Receivables/Payables	557,900	450,400
Allowance for Bad Debts		24,050
Bank	111,800	
Purchases/ Sales	1,759,300	2,815,100
Returns	12,500	20,950
Administrative Expenses	172,500	
Carriage In	10,000	
Selling & Distribution Costs	235,900	
Water & Electricity	11,700	
Interest on Debentures	13,500	
Research & Development Costs	300,000	
	6,655,700	**6,655,700**

The following information is available:

1. The value of inventory held at year end amounted to €197,000.

2. Administrative expenses and water and electricity costs incurred but still outstanding at year end amounted to €12,500 and €5,350 respectively.

3. It is company policy to carry land at fair value. At the end of the year, the market value of the land has been estimated by professional architects at €1,650,000.
   The other non-current assets are depreciated as follows:
   - Buildings at 2%, Straight Line Method;
   - Equipment at 20%, Straight Line Method;
   - Motor Vehicles at 20%, Reducing Balance Method.

A full year's depreciation is calculated on the carrying value of non-current assets at the end of the year, irrespective of date of purchase. It was noted that €50,000 worth of equipment was purchased before 1 January 2011 and that during the year the Company purchased €10,000 worth of equipment which was correctly recorded in the Equipment account but erroneously included in the year-end inventory valuation.

4. It is the Company's policy to maintain an allowance for doubtful debts equal to 5% of trade receivables.

5. Research on the design and development of a new product was carried out during the year. In the first 9 months of the year, the Company incurred €225,000 research costs, however, it was not until October 2016 that it became clear that the product was feasible to develop. Since October 2016, a further €75,000 development costs were incurred.

6. In order to finance this project, the Company raised additional funds of €450,000 from a debenture issue on 30 March 2016. These debentures will be redeemed at par on 30 March 2020 and interest thereon is payable half yearly, in arrears.

7. Due to the magnitude of the project, the Directors opted for a bonus issue instead of recommending a final dividend payment. On 31 December 2016, a bonus issue of one share for every 20 held was made by first capitalising the share premium account and any balance taken from Retained Earnings. No entries have yet been made in the accounts regarding the bonus issue.

8. ABC Limited is subject to a court case concerning an alleged breach of trademark and patent rules. The plaintiff is claiming compensation of €150,000. Although ABC Limited is confident that it did not breach any rules, its legal counsel strongly believes that it is more likely than not that the court case will be won by the plaintiff. No entries have been made in the accounts in this respect.

Required:

A. For the year ended 31 December 2016, prepare the following statements for ABC Limited:
   i. A Statement of Comprehensive Income. (15)
   ii. A Statement of Changes in Equity. (5)

B. Prepare a Statement of Financial Position as at 31 December 2016. (6)

Please turn the page.

SECTION C

Answer any TWO questions from this Section. Each question carries 26 marks.

8. Peter Fisher has been in the retail business for quite some time but has never kept proper accounting records. He asks you to help him prepare a set of proper and acceptable accounting records. You ascertain the following:

1. Fisher's assets and liabilities as at 31 December 2015 and 31 December 2016, included:

	2015	**2016**
	€	**€**
Fixtures (valuation)	24,000	?
Inventories	15,650	21,600
Rent payable in arrears	1,500	?
Trade Receivables	8,400	19,800
Trade Payables	11,300	?

2. The following is a summary of Fisher's bank account for the year ended 31 December 2016:

	€		**€**
Opening balance	6,800	Purchases	163,000
Deposited cash takings	225,200	Rent	16,500
Loan	80,000	Electricity	6,400
		Transport expenses	8,190
		Drawings	8,600
		Fixtures	14,200
		Sundries	3,200

3. Fisher's retail business operated for 52 weeks during 2016. Before banking his weekly takings, Fisher paid the following expenses in cash:
   - o Weekly wages of €180 to his assistant.
   - o Repairs to his private residence of €850.
   - o Sundries of €20 every week.

4. From various documents, you ascertain that during the year 2016:
   - o Bad debts written off during the year amounted to €3,250. A debt of €2,800, written off during 2015, was recovered.
   - o Discounts allowed totalled €8,500 and those received €11,100.
   - o Returns from customers amounted to €9,200 while returns to suppliers were €10,400.
   - o A customer owing €3,200 was also a supplier and this amount was set off against his account in the purchases ledger.
   - o Fisher took some goods, costing €2,800, for his personal use.
   - o Rent is €18,000 per annum and €970 was due for electricity.
   - o The loan of €80,000 was obtained on 1 January 2016 at an interest rate of 5% per annum.
   - o Fixtures are depreciated at 25% on net book value.

5. All sales were made at a uniform mark-up of 33⅓%.

6. Fisher tells you that he promised his assistant a commission of 5% on net profit after charging commission.

Required:

A. Prepare Peter Fisher's Trade Receivables Control Account and Trade Payables Control Account for the year ended 31 December 2016. (10)

B. Prepare the Statement of Profit or Loss for the year ended 31 December 2016 and the Statement of Financial Position as at the end of the year. (12)

C. List **FOUR** books of original entry and give a short explanation of the purpose of each. (4)

9. Piketon Engineering Ltd had the following non-current assets on its books as at 1 April 2016:

	Original cost	Accumulated depreciation
	€	€
Plant & Machinery	285,000	68,400
Fixtures	95,000	32,000
Motor Vehicles	105,000	48,000

Piketon Engineering Ltd depreciates its non-current assets on the following basis:

Machinery	Cost less residual value, written off over 10 years
Motor Vehicles	40% on net book value
Fixtures	10% on original cost

It is company policy to provide for a full year's depreciation in the year of acquisition but none in the year of disposal. The following changes in non-current assets occurred during the year ended 31 March 2017:

1. A new machine was acquired for €84,000. It was estimated that the machine would have a useful life span of ten years with a residual value of €18,000.

2. Another machine with original cost of €55,000 purchased in January 2010 was disposed of, realizing its residual value of €8,000.

3. With the exception of the machines in (1) and (2) above, all the other machinery was purchased in May 2012 and the aggregate residual values were estimated at €35,000.

4. Modifications, costing €7,200, were made to one of the machines acquired in May 2012 to increase its efficiency. It is expected that these modifications will last till the end of the lifespan of the machine itself and shall not increase the machine's scrap value.

5. A Motor vehicle bought in November 2014 at a cost of €18,000 was traded in for a new motor vehicles costing €24,800. An additional payment of €22,600 was paid by cheque. A motor lorry was also purchased for €32,000.

6. Fixtures costing €15,000 purchased in February 2013 were scrapped and replaced by new ones costing €21,000.

Required:

A. For the year ended 31 March 2017, prepare the Machinery, Fixtures and Motor Vehicles Accounts and their corresponding Allowance for Depreciation Accounts. Prepare also the Disposal Accounts including resultant transfer to the Statement of Profit or Loss. (22)

B. Explain why, while the annual depreciation estimate is an expense and debited to the Statement of Profit or Loss, the accumulated allowance for depreciation has a credit balance. (4)

10. Hereunder is information available from the books of Slipway plc for the years ended 31 October 2015 and 2016:

	2015	**2016**
	€	**€**
Premises net book value	240,000	280,000
Plant and Machinery net book value	120,000	198,000
Motor Vehicles net book value	142,000	132,000
Inventories at end of year	156,000	137,000
Trade Receivables	117,000	194,000
Prepayments	1,200	2,800
Bank	4,000	-
Cash	12,000	11,600
Trade payables	89,000	53,000
Bank Overdraft	-	32,000
Accrued Expenses	3,200	7,400
Ordinary Share Capital of €1.00 per share	500,000	700,000
Share Premium	80,000	20,000
General Reserve	85,000	105,000
Retained Earnings	35,000	38,000

During the year ended 31 October 2016:

1. Additional premises were purchased costing €60,000.

2. A lorry, with a book value of €15,400, was disposed of for €12,600, and a new one was purchased for €21,000.

3. An extension to the Plant was constructed at a cost of €100,000. To finance this outlay, a bonus issue of one share for every existing five was made utilising the total balance on the Share Premium Account and the remaining amount from General Reserve. This was followed by an issue of 100,000 shares at a premium.

4. A total of €2,800 interest was incurred on the bank overdraft.

5. Dividends of €25,000 were paid to the shareholders.

Required:

A. Prepare a Statement of Cash Flows for the year ended 31 October 2016 (ignore income tax). (20)

B. A member of the Board of Directors of Slipway plc cannot understand how it is possible for an enterprise to realise a profit and, during the same period, the bank/cash balance diminishes. Prepare a short report to explain why this has happened in the case of Slipway plc during the financial year ended 31 October 2016. (6)

11. The following trial balance was extracted from the books of Crossbones Manufacturing plc as at 31 December 2016:

	€	€
Purchases of Raw Materials	287,000	
Inventories: Raw Materials	32,000	
Finished Good	52,800	
Work-in-progress	19,200	
Factory Direct Wages	85,000	
Supervisors' Wages	28,000	
Administration Expenses	26,200	
Selling Expenses	36,800	
Returns in/Returns out	12,300	8,200
Discount allowed/Discounts Received	18,600	21,200
Factory General Expenses	14,400	
Electricity	15,400	
Rent	50,000	
Plant/Depreciation	250,000	84,000
Motor Vehicles/Depreciation	76,000	32,000
Office Fixtures & Equipment/Depreciation	120,000	35,000
Trade Receivables/Trade Payables	46,300	94,600
Bank		56,000
Capital		100,000
General Reserve		50,000
Retained Earnings		28,200
Provision for Unrealised Profit		4,800
Sales Revenue		656,000
	1,170,000	**1,170,000**

Further information:

1. Provide for depreciation for the year as follows:

	€
Plant	18,000
Motor Vehicles	11,000
Office Fixtures & Equipment	8,400

2. The depreciation charge on Motor Vehicles is to be shared equally between carriage in and carriage out.

3. Rent and electricity are to be apportioned 60% to the factory and the rest to administration overheads.

4. As at year end, Electricity and Rent were accrued by €1,200 and €6,000 respectively, while Administration expenses were prepaid by €2,400.

5. Inventories as at year end have been valued as follows:

	€
Raw Materials	54,000
Work-in-progress	16,460
Finished Goods	38,500

6. Finished Goods are transferred from manufacturing at cost plus 10%.

Required:

A. Prepare the Manufacturing Account of Crossbones Manufacturing plc for the year ended 31 December 2016, showing clearly the prime cost, the cost of manufactured goods, and finished goods at transfer prices. (10)

B. Prepare the Unrealised Profit Account and the Statement of Profit or Loss for the year ended 31 December 2016. (12)

C. Describe **TWO** benefits for the management of a manufacturing concern like Crossbones Manufacturing Ltd that uses transfer pricing to value its manufactured goods. (4)

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

UNIVERSITY OF MALTA, MSIDA

MATRICULATION EXAMINATION
ADVANCED LEVEL
MAY 2017

SUBJECT:	ACCOUNTING
PAPER NUMBER:	II
DATE:	5th May 2017
TIME:	4.00 p.m. to 7.05 p.m.

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.

1. Briefly describe the term 'Economic Order Quantity', clearly indicating how it is measured. (3 marks)

2. Outline **THREE** reasons why the management of a business would require a management accounting system. (3 marks)

3. '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.
   b) Describe **TWO** ways how the 'Margin of Safety' can be increased. (4 marks)

4. The separation of semi-variable and semi-fixed costs is difficult in practice. Briefly describe a mathematical technique that assists accountants to separate costs into their fixed and variable elements. (4 marks)

5. A business has limited resources and is currently analysing its operations in order to assess whether it may stop producing some products. Describe how management would determine which products may be discontinued, clearly indicating the type of costs that would be irrelevant for such a decision. (4 marks)

6. Inventory can be valued using first-in-first-out basis or on a weighted average cost basis. Outline **TWO** advantages and **TWO** disadvantages of each method of inventory valuation. (4 marks)

SECTION B

Answer any THREE questions from this Section. Each question carries 26 marks.

7. Mr. Azzopardi is planning to start a business in July 2017, importing *'TYC tyres'* from Morocco and re-sell them in Malta at a gross profit mark-up of 20%. He has invested €30,000 from his personal savings in the business, and obtained a bank loan of €50,000. He wishes to ensure that these funds will be sufficient and has asked you, his accountant, to provide him with projections on the cash requirements of his new venture based on the following information:

   1. Monthly sales in units are forecasted as follows:

	July	**August**	**September**	**October**
Sales – units	800	1,300	1,800	2,100

   2. Mr. Azzopardi will be selling goods to other retailers and to individual customers. He expects that 70% of the sales will be to other retailers. 40% of such sales revenue will be received in the month in which the goods are sold with the remaining to be received in the following month. While no credit will be given to individual customers, they will benefit from a 5% cash discount.

   3. Purchases from the Moroccan supplier are to be arranged so that the inventory held at the end of each month covers the sales projected for the following month. 20% of these purchases are paid for in the month the order is made, with the balance being paid in the following month. At the beginning of July, Mr. Azzopardi bought stock to cover the sales for July, on the agreed credit terms.

   4. The cost of each tyre for Mr. Azzopardi is €80.

   5. Mr. Azzopardi will rent a garage and a small office for €4,000 per annum. The rent is spread evenly over the year and is paid quarterly in advance.

   6. Mr. Azzopardi will also acquire a second hand delivery van in July costing €15,000. 10% of the cost is payable on acquisition and the remaining balance is to be paid in 4 equal monthly instalments starting from 1st October. This van will be depreciated at the rate of 20% per annum on cost using a pro-rata basis.

   7. Other administrative expenses (including the depreciation on the delivery van) are forecasted at €1,750 per month and are paid in the month in which they are incurred.

Required:

A. Prepare a monthly cash budget for the three months ending 30th September 2017. (18)

B. Prepare an extract from the budgeted Statement of Financial Position as at 30th September 2017, showing only the current assets and current liabilities. (2)

C. Cash is the most essential resource of a business. Without sufficient cash a business will be unable to operate. List **TWO** reasons why preparing a cash budget is essential. (6)

8. An export-oriented company has decided to relocate its manufacturing operations to Malta to increase its operational efficiency. The company manufactures a number of products and has a standard costing system in place.

The budgeted figures for one of its products for the month of March 2017 were as follows:

Selling price per unit	€160
Budgeted Sales and Production	10,000
Material per unit	10 kilograms at €6.00 per kg
Labour Cost per unit	4 hours at €7.00 per hour
Total Variable Overhead Cost	€76,000
Total Fixed Overhead Cost	€44,000

The variable and fixed overheads are absorbed according to labour hours.
The actual figures for the month of March 2017 were as follows:

Selling price per unit	€155
Units produced and sold	11,000
Cost of Materials used in production	105,000 kilograms at €6.20 per kg
Labour Cost	€281,200 for 38,000 hours
Total Variable Overhead Cost	€80,000
Total Fixed Overhead Cost	€42,000

Required:

A. Calculate the Budgeted Profit and the Actual Profit for the month of March 2017. (4)

B. Calculate the following variances for the month of March 2017, and prepare a statement that reconciles the two profit figures calculated in (A):
   i. Total material variance analysed into price variance and usage variance;
   ii. Total labour variance analysed into rate variance and efficiency variance;
   iii. Total variable overhead variance analysed into expenditure and efficiency variance;
   iv. Total fixed overhead variance analysed into expenditure and volume variance;
   v. The sales price variance and the sales volume variance. (18)

C. Describe **TWO** possible reasons that may give rise to favourable material cost variances, and **TWO** possible reasons that may give rise to favourable labour cost variances. (4)

Please turn the page.

9. FOUR Limited is a company manufacturing four products for the local market. The raw material used by the company for the manufacture of its products is all imported. Due to uncontrolled circumstances in the country of the company's supplier, the supply of the raw material is expected to be very limited. FOUR Limited has in fact been informed that in the three months ending 30 September 2017, the total supply of raw material is restricted to 182,000 kilograms. There are no other substitutes to this material and other suppliers do not provide the correct specification of the raw material required by FOUR Limited.

The company's budget for the three months ending 30 September 2017 is the following:

Product	**Coy**	**Joy**	**Roy**	**Soy**
Kilograms of raw material per unit (kg)	6	8	10	8
Direct labour hours per unit (hours)	4	5	6	3
Selling price per unit (€)	90	112	120	80
Expected demand (units)	9,000	7,800	12,000	6,000

The raw material cost is €4 per kilogram. The direct labour rate is €8 per hour. The variable overhead is absorbed at the rate of 50% of direct labour cost. The fixed production overheads are budgeted at €316,000, and are absorbed in cost of production on a labour hour basis.

Required:

A. Establish a production plan for FOUR Limited that maximises profit for the three months ending 30 September 2017, taking into consideration the limited availability of the raw material. (14)

B. Prepare a profit statement showing contribution and profit made based on your recommendation in (A) above. (8)

C. Write a short report to management clearly explaining the term 'limiting factor' and the importance of identifying such a factor in the decision-making process. (4)

10. Robert Camilleri is the owner of a manufacturing concern that has two production departments, namely, the Machining Department and the Finishing Department. The two production departments are serviced by the Stores and Maintenance Departments.

Budgeted overheads for the year ended 30 June 2017 were as follows:

	€
Indirect wages	332,600
Indirect materials	15,222
Stores consumables	8,619
Maintenance tools consumed	5,419
Electricity	66,990
Rent	36,000
Insurance of machinery	11,680
Insurance of premises	10,850
Depreciation of machinery	29,200

The following budgeted information is also available:

	Machining	Finishing	Stores	Maintenance
Machinery Cost – €	160,000	120,000	-	12,000
Machine Hours	40,300	7,000	-	800
Direct Labour Hours	6,200	14,600	-	-
Number of Indirect Employees	10	6	3	1
Indirect Materials – €	9,684	2,466	1,842	1,230
Electricity Units	156,290	62,160	3,500	1,350
Floor Area (m^2)	1,200	800	300	100

Included in the insurance of premises is an amount of €2,225, which is incurred exclusively for the maintenance department. The remaining insurance relates to the other three departments.

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

	Machining	Finishing	Maintenance
Stores	40%	50%	10%
Maintenance	80%	20%	

The actual results for the year ended 30 June 2017 were as follows:

	Machining	Finishing
Total Overheads – €	312,662	197,630
Machine Hours	39,720	7,100
Labour Hours	6,500	14,690

Required:

A. Calculate the budgeted overhead recovery rate for the year ended 30 June 2017 using both the machine hour rate and the labour hour rate for each production department. (12)

B. Determine the most appropriate overhead recovery rate for the production departments, clearly explaining the reason for your choice. (4)

C. Calculate the amount of overheads that would be over or under absorbed by each production department during the year. (6)

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

N.B. Round your answers correct to 2 decimal places.

11. A foreign company, planning an international event in Malta, has requested a quote for the provision of security services from a local company. The local security company provides both general and specialised security services, and has asked you, their accountant, to work out an appropriate labour hour charge rate for its two services.

The local company's employees are as follows:

Type of Labour	Description	Number of employees	Total Gross Annual Salary per employee €
Direct Labour	Specialised security personnel	20	28,200
Direct Labour	General security personnel	80	12,000
Direct Labour	Other direct personnel	8	12,800
Indirect Labour	Various	6	13,400

The following information is available:

1. Besides the annual salary, each employee is entitled to receive the statutory bonus of €500 per annum.

2. National insurance at the rate of 10% of the gross salary (excluding bonus) is payable by the company.

3. The labour cost of the other direct personnel should be allocated in proportion to the number of general security personnel and specialised security personnel.

4. Indirect labour should be equally allocated between general and specialised security.

5. The company's annual overheads are estimated at €90,100 per annum and are allocated as follows: specialised security – €38,900 and general security – €51,200.

6. All employees work a 40-hour 5-day week. Each employee is entitled to 24 days as vacation leave per annum. Based on past trends, each employee takes on average 14 days per annum as sick leave.

7. The company's policy is to register a profit loading of 20% on cost.

Required:

A. For each of the two services provided by the local security company, calculate the cost incurred per labour hour. (16)

B. Calculate the labour hourly rate to be charged to the company's customers for each of its two services. (3)

C. The local security company has received a request for a quotation from a Maltese Government entity for a job that will require 90 hours of specialised security services and 236 hours of general security services. Based on your workings in (A) and (B), what is the amount to be quoted for the hours of service required. (3)

D. Briefly explain the impact of a high rate of labour turnover on the costs of an organisation. (4)

N.B. Round your answers correct to 2 decimal places.