MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

L-Università ta' Malta

ADVANCED MATRICULATION LEVEL
2018 SECOND SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	I
DATE:	3rd September 2018
TIME:	9:00 a.m. to 12:05 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. You are preparing the financial statements of a non-profit making organisation. Identify **THREE** features you expect to come across which are different from the financial statements of a limited liability company. (3 marks)

2. Identify **THREE** differences between a private limited liability company and a public limited liability company. (3 marks)

3. Explain the rationale and also make reference to the specific accounting concept underlying the Provision for unrealised profits in a manufacturing concern. (4 marks)

4. During the year ended 31 December 2017, XYZ Limited made a bonus issue of 1,000 ordinary shares. Since the company did not receive any cash, the accountant credited the Ordinary Share Capital Account with the market value of the new shares. No further postings were made. State whether you agree with this accounting treatment and explain why. (4 marks)

5. Define gearing and identify **ONE** advantage and **ONE** disadvantage of raising finance through debt rather than equity. (4 marks)

6. Briefly highlight the difference between a provision and a contingent liability. (4 marks)

Questions continue on next page

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 XYZ Limited on 31 December 2017:

	€	€
Ordinary Share Capital (€0.50 per share)		900,000
Revaluation reserve		125,000
Share premium		225,000
Retained earnings		675,000
Interim ordinary dividend paid	22,500	
5% Malta Government Stocks (MGS)	130,000	
Freehold land	1,300,000	
Buildings	350,000	
Equipment	74,500	
Motor vehicles	75,000	
Allowance for depreciation b/f:		
Buildings		162,300
Equipment		47,650
Motor vehicles		11,250
Inventories (31 December 2016)	133,400	
Trade receivables/payables	284,100	322,050
Allowance for bad debts		12,000
Bank	775,000	
Purchases/Sales	675,000	1,336,000
Returns outwards		20,950
Interest on MGS		3,250
Selling & distribution costs	120,000	
Water & electricity	11,700	
Miscellaneous expenses	13,500	
Administrative expenses	110,000	
Suspense		234,250
	4,074,700	**4,074,700**

The following information is also available:

a) Inventory held at year end was valued at €156,000.

b) Administrative expenses and water and electricity costs incurred but still outstanding at year end amounted to €27,500 and €2,350, respectively.

c) XYZ Limited carries non current assets at cost less accumulated depreciation with the exception of land which is carried at revalued amount. The company's architect valued the land at €1,200,000 as at 31 December 2017.

d) Non current assets are depreciated as follows:
   i) Buildings at 2%, Straight Line Method;
   ii) Equipment at 20%, Reducing Balance Method; and
   iii) Motor Vehicles at 20%, Reducing Balance Method.

e) The receivables balance includes an amount of €20,000 owed by a customer who has been declared bankrupt. A review of other receivables indicates that 5% of these are expected as credit losses (not collectable).

f) While reviewing transactions for 2017 in order to resolve the balance on the Suspense Account, the following were noted:
   i) Goods returned by customers amounting to €7,875 were posted to the Returns Outwards account and credited in the customers' account.
   ii) Equipment worth €10,000, acquired during the year, was classified as a 'Miscellaneous expense'.
   iii) Included in the purchases figure is €32,000 worth of goods for resale. These goods were subject to a 2% trade discount. The accountant of XYZ Limited recorded the purchase by debiting the purchases account and crediting the trade payables account with the full gross amount of €32,000.
   iv) The sales and receivables figures include €15,000 worth of sales made on a 'sale or return basis' at a gross profit mark-up of 20%. These goods were not sold by XYZ Limited's customer by end of year.
   v) During 2017, XYZ Limited issued 100,000 ordinary shares at €1 each share. In addition, on 1 December 2017, the company also issued €150,000 debentures at par with a coupon rate of 5% maturing in 2027. Both issues were fully taken up and the cash was deposited in the bank, but no other entries were made in the books.

Required:

A. For the year ended 31 December 2017, prepare the following statements for XYZ Limited:
   i) A Statement of Profit and Loss; (15)
   ii) A Statement of Changes in Equity. (5)

B. Prepare a Statement of Financial Position as at 31 December 2017. (6)

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

8. Though JJ Paul has been in the retail business for quite a number of years, he has never bothered to keep proper accounting records. He has been summoned by the Inland Revenue Department to explain discrepancies in his reporting, so he decided to keep a proper set of books as from 1 January 2017. He passed on all records, receipts and other documents to an accounting firm to make the required changes. From these, it was possible to ascertain the following:

   a) JJ Paul had the following assets:
      i) Land and buildings with a book value as at 1 January 2017 of €180,000, of which €80,000 was for the value of the land. JJ Paul engaged a professional valuer who reported that the land is now worth €130,000. From notes it transpires that JJ Paul depreciates the buildings at 5% on net book value.
      ii) Motor vehicles: the book value as at 1 January 2017 was €840 for the car and €22,000 for the van. During the year ended 31 December 2017, the car was scrapped. Depreciation on Motor vehicles is calculated at 25% on net book value.
      iii) Furniture and fittings bought in February 2013 for €24,000. These had an estimated residual value of €2,000, and were being written off over 10 years.
      iv) Inventory of goods costing €55,000. According to JJ Paul, this amount was 25% higher than at 1 January 2017.

Question continues on next page

b) A full year's depreciation is charged in the year of acquisition; while no depreciation is taken in the year of disposal.

c) The bank balance on 1 January 2017 stood at €6,800 (debit). From the bank statements and cheque stubs, the following payments made during 2017 could be deduced:

Payments	**€**
Wages	9,300
Electricity	2,300
Insurance	3,700
Advertising	1,470
Drawings	12,400
Selling expenses	3,269
Administration expenses	5,203
Running expenses	2,600
Payments to suppliers	105,000

d) The petty cashbook showed a balance of €220 on 1 January 2017, but there was only €115 in the cash till on 31 December 2017. Paul explained that he often pays small expenses directly out of cash before depositing all the receipts in the bank. Petty cash payments included €80 a week to a part-time cleaner, stationery amounting to €230 in total, and miscellaneous of €36 monthly. (Assume a 52-week year).

e) JJ Paul's records revealed that, on 1 January 2017, he owed €640 for electricity, €380 for running costs and €230 for insurance.

f) On 31 December 2017, insurance was prepaid by €350. On the same day, administration expenses and electricity were in arrears by €840 and €760, respectively.

g) From other consultations with JJ Paul it emerges that very scant records were kept with regards to sales and purchases but further investigations revealed the following for the year 2017:
   i) All sales were conducted at a uniform profit margin of 33⅓% on sales.
   ii) 80% of sales were allowed a cash discount of 5%. Discounts received were €15,600.
   iii) Credit notes revealed that returns in amounted to €18,400 and returns out were €18,900.

h) Trade receivables and trade payables amounted to:

31 December 2016	**31 December 2017**	
Trade receivables	28,600	12,400
Trade payables	35,130	26,400

i) It also transpired that, during 2017, an account in the sales ledger amounting to €1,230 was set off against another in the purchases ledger, as both accounts belonged to a company that was both a supplier and a customer.

j) According to the employment agreement, as from 1 January 2017, the employee of JJ Paul was to get a commission of 5% of the profits earned after charging commission.

Required:
For the twelve months ended on 31 December 2017, prepare for JJ Paul:
A. A Statement of Profit or Loss, giving as much detail as possible; (16)
B. The Statement of Financial position as at year end. (10)

9. Sanex plc, a pharmaceutical concern, had the following balances on its books as at 1 April 2017 regarding non-current assets. The respective depreciation methods are also indicated.

Non-current asset	Original cost/valuation	Depreciation allowance	Depreciation method
	€	€	
Land and buildings	240,000	56,000	5% straight line
Furniture and fittings	80,000	28,000	Written off over 10 years in equal instalments
Motor vehicles	98,000	32,000	40% reducing balance
Loose tools	32,000	--	Revaluation method

Land and buildings included €80,000 for the cost of land.

During the year ended 31 March 2018, the following acquisitions and disposals of non-current assets were made:

- Furniture bought in February 2011 for €17,800 was scrapped;
- New furniture costing €24,000 was acquired in February 2018;
- A motor vehicle purchased on 15 September 2014 for €15,000 was part exchanged for a new one costing €18,000. The trade in value of the old vehicle was €3,800;
- Loose tools costing €6,500 were purchased in January 2018.

Other information:

a) A piece of furniture of original cost of €12,500 has been in use for more than ten years.

b) It was decided that the remaining furniture, including that purchased during the current year, was to be written off over the next five years.

c) On 31 March 2018, the loose tools were valued at €34,200.

d) On 31 March 2018, an architect appointed by Sanex plc valued the company's land and buildings at €350,000. The Board of Directors of Sanex plc decided to reflect this valuation in the company's Statement of Financial Position.

e) Sanex plc provides a full year's depreciation in the year of acquisition, and none in the year of disposal.

Required:

A. Prepare the following accounts of Sanex plc for the year ended 31 March 2018:
   i) The Land and buildings, the Motor vehicles, the Furniture and fittings, and the Loose tools accounts; (8)
   ii) The Depreciation Allowance, Disposals and Revaluation accounts. (14)

B. Explain your treatment of point (b) given in the question as part of 'other information'. (4)

Questions continue on next page

10. The following information has been extracted from the published accounts of Ragbox plc for the financial years ended 30 June 2017 and 2018:

Statement of Financial Position as at 30 June	**2018** €'000	**2017** €'000
Non-current assets:		
Intangible assets	17,000	16,250
Property and equipment	54,500	51,250
	71,500	67,500
Current assets:		
Inventories	3,720	2,500
Trade and other receivables	50,150	56,250
Other assets and investments	356,000	262,500
Cash and cash equivalents	46,930	65,500
	456,800	386,750
Total assets	528,300	454,250
Ordinary Share Capital	46,250	46,250
Retained earnings	273,900	253,220
Revaluation reserve	8,750	12,370
	328,900	311,840
Non-current liabilities:		
Loans and borrowings	94,750	46,040
Current liabilities:		
Trade payables	54,650	52,870
Other payables	50,000	43,500
	104,650	96,370
Total equity and liabilities	528,300	454,250

Statement of Comprehensive Income for the years ended 30 June	**2018** €'000	**2017** €'000
Revenue	275,000	300,000
Cost of sales	(175,750)	(163,900)
Gross profit	99,250	136,100
Research and development expenses	(3,100)	(4,500)
Selling, general and administrative expenses	(26,550)	(23,750)
Other income	1,250	1,060
Profit before interest and tax	70,850	108,910
Interest expense	(1,500)	(900)
Profit before tax	69,350	108,010
Income tax expense	(33,620)	(36,200)
Profit after tax	35,730	71,810
Other comprehensive income	(3,620)	3,000
Total comprehensive income	32,110	74,810

Other comprehensive income relates to revaluation gains and losses from property.

The Finance Director has provided you with the following average industry ratios to use in your analysis:

Gross profit margin	40%
Net profit margin	31%
ROCE	30%
Current ratio	2.40
Quick ratio	1.90

Required:

A. Calculate **THREE** profitability ratios, **THREE** liquidity ratios, and **ONE** gearing ratio, for Ragbox plc, for each of the two years. (7)

B. Comment on the company's profitability, liquidity and gearing for the two-year period, comparing with industry average where available. (13)

C. Describe **THREE** limitations when using ratio analysis to assess the comparative performance of an entity. (6)

11. The following are the Statements of Financial Position of Quinox plc, as at 31 December 2016 and 2017:

	2017 **€**	**2016** **€**
Non-Current assets (Net book value)	591,000	473,000
Current assets:		
Inventories	42,300	62,400
Trade receivables	76,600	44,200
Bank	28,100	32,400
	147,000	139,000
Total assets	**738,000**	**612,000**
Equity:		
Ordinary share capital (€1 nominal value)	500,000	360,000
Share premium	40,000	60,000
Revaluation reserve	15,000	5,000
General reserve	30,000	20,000
Retained earnings	25,500	95,300
	610,500	540,300
Long-term liabilities:		
6% debentures	100,000	40,000
Current liabilities:		
Trade payables	27,500	31,700
Total equity and liabilities	**738,000**	**612,000**

Further information about the year ended 31 December 2017:

a) In January 2017, a bonus issue of 1 share for every existing 9 was made, utilising the share premium account.

b) New machinery was purchased for €205,000 in March 2017.

c) To partly finance the investment in machinery, new shares were issued at €1.20 per share, and a debenture issue was also made on 1 April 2017.

Question continues on next page

d) Non-current assets with a net book value of €68,000 were disposed of during the year, at a loss of €14,000.

e) Non-current assets include land, which was revalued during the year.

f) The final dividend for 2016, amounting to €24,000, was paid in February 2017.

g) There is no accrued debenture interest at year end.

Required:

A. Prepare the Statement of Cash flows of Quinox plc for the year ended 31 December 2017. (22)

B. Give **TWO** reasons why the Statement of Cash flows is considered of such importance to stakeholders as to be included in the published accounts. (4)

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

ADVANCED MATRICULATION LEVEL
2018 SECOND SESSION

SUBJECT:	**Accounting**
PAPER NUMBER:	II
DATE:	4th September 2018
TIME:	9:00 a.m. to 12:05 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. Identify the **THREE** elements of costs to be taken into consideration when calculating the total cost of a product or service, and give **ONE** example for each element. (3 marks)

2. A break-even chart must be interpreted in the light of the limitations of its underlying assumptions. Discuss briefly the extent to which this statement is valid. (3 marks)

3. The costing method used by business organisations must suit the method of production or service provided. Explain briefly. (4 marks)

4. Suggest **TWO** possible reasons for an adverse labour efficiency variance and **TWO** possible reasons for a favourable material price variance. (4 marks)

5. A business produces two different types of products which require the same type of labour skills. During the preparation of the budget, it is determined that the availability of such skilled labour would not be sufficient to achieve the budgeted output. Describe how management would determine the ideal production quantities of each type of product, assuming that the business cannot acquire similarly skilled labour from other sources. (4 marks)

6. Identify the fundamental difference between marginal and absorption costing, and explain how such difference would affect inventory valuation and reported profits. (4 marks)

Questions continue on next page

SECTION B

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

7. Valletta Limited started retail operations on 1 September 2018. The proceeds received from the issue of share capital, amounting to €70,000, were deposited with a local bank. In addition to this cash inflow, Valletta Limited is also considering taking out a loan on a short term basis. The company is requesting you to prepare a statement to determine the cash requirements of the new venture for the 3-month period ending 30 November 2018. For this purpose, the following information was provided.

In order to be in a position to start its operations, the company acquired non-current assets costing €300,000. A cash deposit of 30% had to be paid on 1 September 2018. The remaining balance has to be settled in six equal monthly instalments on the beginning of every month. Non-current assets are to be depreciated using the straight line method at 20% per annum, on a pro-rata basis. The estimated value of the non-current assets at the end of their expected useful life is deemed immaterial.

At the beginning of September 2018, the company acquired goods to cover the sales projected for the month of September and October. The company decided to maintain inventory levels at month end to cover the sales projected for the following month. Suppliers request payment for 50% of the value transacted in the month of purchase. The remaining balance has to be settled in the month following the purchase transaction.

All the goods produced are sold at a gross profit margin of 70% and budgeted sales are as follows:

September	€ 70,000
October	€ 80,000
November	€100,000
December	€105,000

35% of the sales shall be on a cash basis, attracting a discount of 5%. 25% of sales revenue will be settled in the month following the sale, while the remaining balance is expected to be received two months after the sale.

Gross wages are budgeted at €8,000 per month. 15% of gross wages represent tax deductions and the employees' share of national insurance contribution. Whereas the employer's share of national insurance contribution amounts to 10% of gross wages. Net wages are to be paid on the last day of each month, whereas tax and national insurance contributions (including the company's share) will be paid in the following month.

Finance costs, comprising interest and bank charges, are estimated at €150 and are payable at the end of each month. Other overheads, excluding depreciation, are estimated at €5,000 per month. Overheads have to be paid one month after they are incurred.

Required:

A. Prepare a monthly Cash Budget for the three-month period ending 30 November 2018. (11)

B. Prepare the budgeted Statement of Profit or Loss for the three months ending 30 November 2018 and the Statement of Financial Position as at that date. (11)

C. With reference to the results obtained in (A) and (B), briefly explain how a company can generate profit but still have an overdrawn bank balance. (4)

8. Frasier Ltd operates a number of shops in the main shopping centres of Sliema, Paola and Valletta. The inventories are stored in a warehouse in Mriehel and deliveries are regularly made to the shops. On 1 July 2018, there were 9,800 units of product Zee in inventory, with a total value of €548,800.

The following movements in product Zee took place during the month ended 31 July 2018:

Purchase date	**Units**	**Purchase price per unit**	**Total freight costs**
		€	**€**
July 3	5,200	56.40	8,320
July 9	7,620	58.70	9,906
July 17	5,970	62.60	8,358
July 25	8,120	55.80	9,744

Issues date	**Units**	**Selling price per unit**
		€
July 2	7,200	78.00
July 7	7,100	79.00
July 13	5,360	85.00
July 15	2,110	85.00
July 28	9,260	81.00

The following additional information about product Zee is available:

Re-order period	4 – 6 days
Economic order quantity	3,820 units
Maximum consumption per day	1,100 units
Minimum consumption per day	960 units

Required:

A. Calculate the inventory value of product Zee as at 31 July 2018, using the following methods of valuation on a perpetual basis:
   i. First In First Out (FIFO)
   ii. Weighted Average Cost (AVCO) (10)

B. Calculate the gross profit for the month of July 2018 on product Zee, using both methods of inventory valuation. (5)

C. Using the information provided, calculate the following for product Zee:
   i. Re-order level;
   ii. Maximum inventory level;
   iii. Minimum inventory level. (6)

D. Why is it important to control inventory levels? State and briefly describe **THREE** types of costs that may arise when excessive stock is held. (5)

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

Questions continue on next page

9. Nigel Pulis is the owner of a small factory manufacturing a popular fruity drink for the local market. The production of this drink requires three processes, namely, Process A, Process B and Process C. The output of each process is transferred to the next process, with the output of Process C being transferred to stores as finished inventory.

The following information is available for the month of August 2018:

	Process A	**Process B**	**Process C**
Direct Material – litres	20,000	12,000	4,100
Direct Material cost total - €	41,600	25,280	12,710
Direct Labour - €	4,900	3,600	2,400
Direct expenses - €	1,600	1,454	650
Normal loss - % of all input	10%	3%	-
Scrap value of loss per unit - €	0.20	0.30	-

Production overheads amounted to € 6,000 and are absorbed on the basis of direct labour hours. The direct labour hour rate in each process is as follows:

Process A	€7.00 per hour
Process B	€6.00 per hour
Process C	€8.00 per hour

The output from each process was as follows:

Process A	17,600 litres
Process B	28,900 litres
Process C	32,700 litres

There was no opening or closing inventory or work in progress in any process.

Required:

A. Prepare process accounts for each of the three processes. (15)

B. Prepare the normal loss, abnormal loss and abnormal gain accounts. (7)

C. Explain why the accounting treatment of normal loss and abnormal loss is different. (4)

10. Ajruplani Limited manufactures a component which is used in the airline industry. The company operates two production departments, namely, the Machining Department and the Assembly Department. These two production departments are serviced by two departments, namely, the Quality Control Department and the Maintenance Department. Budgeted overheads for the year ended 30 June 2018 were as follows:

	€
Indirect wages	492,900
Tools	9,866
Electricity	64,500
Insurance of premises	8,050
Maintenance materials	1,550
Rent	80,500
Depreciation of machinery	40,700

The following information is also available:

	Machining	**Assembly**	**Quality Control**	**Maintenance**
Floor area (sq. metres)	1,200	800	80	220
Number of indirect employees	15	9	4	3
Electricity - units	138,720	110,660	5,340	3,280
Machinery cost – €	298,000	109,000	-	-
Machine hours	32,360	11,291	-	-
Direct labour hours	8,090	22,582	-	-

The tools were utilised as follows:

Machining department	€2,554
Assembly department	€5,788
Quality control department	€1,524

The maintenance materials were for the sole use by the Maintenance department.

The cost of the Maintenance department is allocated to the other departments as follows: 50% to the machining department, 35% to the assembly department and 15% to the quality control department.

The time spent by the Quality control department on the machining department amounts to 30%, whereas the remaining 70% is spent on the assembly department.

The actual results for the year ended 30 June 2018 were as follows:

	Machining	**Assembly**
Total Overheads – €	401,356	297,425
Machine Hours	31,952	12,356
Labour Hours	7,923	22,952

Required:

A. Calculate the budgeted overhead recovery rates for the year ended 30 June 2018, 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 each production department and explain 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** reasons why overhead recovery rates are calculated. (4)

11. A medium-sized local construction company provides building and construction services to a wide array of clients. The company used to charge an inclusive hourly rate irrespective of the grade of workers used on the job. However, it now wishes to charge its clients an hourly rate depending on the grade of workers employed on the job. You have been approached to help the company determine the hourly rate for each grade of worker.
The workers employed by the company are as follows:

		Number of employees	**Weekly Gross Basic Wage per employee**
			€
Direct Labour	Skilled workers	10	570
Direct Labour	Unskilled workers	15	400
Indirect labour		3	525

The following additional information is available:

a) A statutory bonus of €512 per annum is paid to each employee besides the basic annual wage;

b) National insurance at the rate of 10% of the gross basic wage is payable by the company;

c) Due to the nature of the company's work, a private insurance scheme is paid by the company for all its employees and is calculated at 3% of the gross basic annual wage;

d) Indirect labour is to be allocated in proportion to the number of skilled workers and unskilled workers;

e) The company's annual overheads are estimated at €82,000 per annum. It has been decided to allocate overheads as follows: 30% to skilled workers and 70% to unskilled workers.

f) All employees work a forty-hour week. Each employee is entitled to 25 days as vacation leave per annum. Each employee takes on average 12 days per annum as sick leave.

g) The skilled workers work on average 100 hours of overtime per annum each. Overtime is paid at one and a half time the normal hourly rate.

h) An allowance of €767 per annum is paid to one of the indirect labour workers since he performs extra duties.

i) The company's policy is to register a profit loading of 30% on cost.

Required:

A. Calculate the cost per labour hour for skilled and unskilled workers. (14)

B. Calculate the labour hourly rate to be charged to the company's customers for both skilled and unskilled workers. (2)

C. The company directors have proposed that no overtime is paid. Instead a weekly allowance of €30 is to be paid to the skilled workers. Calculate the labour hourly rate to be charged to the company's customers for skilled workers if the above proposal is implemented. (6)

D. Briefly discuss the difference between time-rate and piece-rate methods of remuneration. (4)

The answers are to be calculated to the nearest 2 decimal places