

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
MAY 2017

SUBJECT:	ACCOUNTING
DATE:	4 th May 2017
TIME:	4:00 p.m. to 7:05 p.m.

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

Section A

Answer question 1. This question carries 24 marks.

Section B

Answer any **TWO** questions from this Section. Each question carries 18 marks.

Section C

Answer any **TWO** questions from this Section. Each question carries 20 marks.

Section A

Answer Question 1. This question carries 24 marks.

1. The following trial balance was extracted from the books of Herrings plc on 31 December 2016:

	€	€
Ordinary share capital of €0.50 per share		300,000
Share premium		50,000
General reserve		35,000
Retained earnings		72,000
8% debentures		100,000
Premises	600,000	
Office equipment	180,000	
Motor vehicles	125,800	
Depreciation allowance: Premises		31,800
Office equipment		48,000
Motor vehicles		56,000
Sales		2,150,000
Inventories 1 January 2016	130,000	
Purchases	1,420,000	
Distribution expenses	180,200	
General administration expenses	126,000	
Returns in>Returns out	51,000	15,600
Discount allowed/ Discount received	34,800	24,000
Bad debts	12,800	
Bad debt allowance		4,800
Trade receivables/trade payables	156,400	104,400
Interim dividend	18,000	
Debenture interest	4,000	
Bank		47,400
	3,039,000	3,039,000

Additional information:

- a) Closing inventories amounted to €97,500.
- b) At the year end, distribution costs were prepaid by €8,600 and €11,200 were still owing for administration expenses.

- c) Towards the end of the year a motor vehicle originally costing €15,000 was disposed of for €4,200 at a loss of €3,600. The only entries made were to debit the bank with the amount received, which amount was credited to the Motor Vehicles account.
- d) Depreciation on non-current assets is to be provided at 5% on premises, 10% on office equipment, both on cost; and 40% on the written down value of motor vehicles. Depreciation is to be provided for a full year on non-current assets still on the books at year end.
- e) An analysis of the trade receivables at the end of the year showed that a balance of €3,100 shall not be collected because the customer is bankrupt; while the collection of €1,200 due from another customer is considered to be doubtful.
- f) The board of directors recommends a transfer to general reserve of €50,000.

Required:

- a. Prepare for Herrings plc for the year ended 31 December 2016:
 - i. A Statement of Profit or Loss; (10)
 - ii. A Statement of Financial Position. (10)
- b. Distinguish between capital and revenue reserves, including **ONE** example of each type of reserve. (4)

(Total: 24 marks)

Please turn the page.

Section B

Answer any TWO questions from this Section. Each question carries 18 marks.

2. Line and Hook plc has extracted the following data from its financial statements:

	31 March 2016 €	31 March 2017 €
Statement of Profit or Loss		
Sales revenue	590,000	680,000
Cost of sales	413,000	421,600
Gross profit	177,000	258,400
Selling expenses	54,400	96,000
Administrative expenses	69,000	112,000
Loan interest	6,400	9,600
Net profit	47,200	40,800
Statement of Financial Position (extract)		
<i>Non-current assets (at net book value):</i>		
Land and buildings	200,000	220,000
Equipment	80,000	72,000
Motor vehicles	52,000	40,000
	332,000	332,000
<i>Current assets:</i>		
Inventory	45,000	72,000
Trade receivables	75,000	96,000
Bank	28,000	--
	148,000	168,000
<i>Current liabilities:</i>		
Trade payables	92,000	64,000
Accrued expenses	15,000	23,000
Bank overdraft	--	16,000
	107,000	103,000
<i>Long term liability:</i>		
8% Loan	80,000	120,000

Additional information:

Inventories on 1 April 2015 amounted to €28,000.

Required:

- a. For both years ended 31 March 2016 and 31 March 2017, calculate:
- i. Gross profit margin
 - ii. Net profit margin
 - iii. Return on capital employed
 - iv. Utilisation of capital employed
 - v. Current ratio
 - vi. Acid test ratio
 - vii. Inventory turnover
 - viii. Payables payment period
 - ix. Receivables collection period (14)
- b. According to your results in (a), identify an area where Line and Hook plc has improved and another area where it has done worse when compared to the previous year. Explain your answer. (4)
- (Total: 18 marks)**

Please turn the page.

3. Anglers' Delight has been producing and retailing fishing gear for a number of years. On 31 December 2016, the proprietor extracted the following balances:

	€
Inventories as at 1 January 2016:	
Raw materials	92,950
Work-in-progress	76,000
Finished goods	105,000
Sales revenue	845,000
Purchases of raw materials	434,000
Power and lighting	64,000
Direct wages	82,000
Supervisors' wages	20,000
Other factory overheads	18,000
Office salaries	12,000
Administration costs	19,600
Selling and distribution costs	24,000
Returns in	24,600
Returns out	19,200
Rent	36,000

The following are to be taken into consideration:

a) Inventories on 31 December 2016 consisted of:

	€
Raw materials	115,000
Work-in progress	54,000
Finished goods	118,000

b) Total depreciation of non-current assets was estimated to be €42,000. This amount was to be apportioned 75% as Manufacturing overhead and the remainder divided equally between Administration costs and carriage inwards.

c) At the year end, expenses prepaid and accrued were as follows:

	Prepaid €	Accrued €
Factory Overheads	4,300	-
Administration	-	9,800
Selling and Distribution	-	12,400

d) The following basis of apportionment are to be applied:

	<i>Factory</i>	<i>Administration</i>	<i>Selling & Distribution</i>
Power and lighting	80%	10%	10%
Rent	60%	25%	15%
Office salaries	-	75%	25%

Required:

- a. Prepare the Manufacturing Account and the Statement of Profit or Loss for Anglers’ Delight for the accounting year ended 31 December 2016. (14)
- b. Distinguish clearly between direct and indirect factory costs. Illustrate your explanation by relevant examples. (4)

(Total: 18 marks)

4. On 1 January 2016, the Statement of Financial Position of Dolphin Engineering plc showed the following non-current assets:

	<i>Original Cost</i>	<i>Depreciation</i>
	€	€
Machinery	280,000	76,000
Furniture and equipment	85,000	33,000
Motor vehicles	105,000	46,000

Dolphin Engineering plc also had a set of loose tools valued at €3,600 on 1 January 2016.

During the year ended 31 December 2016, the following movements in non-current assets took place:

- a) In February 2016, a motor lorry bought in January 2013 for €22,000 was disposed of and realised €7,500.
- b) In November 2016, another vehicle bought in October 2015 for €17,500 was found to be inadequate and part-exchanged for another costing €28,000. The trade-in allowance was €13,200.
- c) Machinery purchased in February 2009 for €12,800 had become obsolete and was scrapped.
- d) Apart from the motor vehicle mentioned in (b) above, the following were acquired:

	€
Machinery	34,000
Equipment	18,000
Loose tools	1,300

It is company policy to provide a full year’s depreciation on the balance of non-current assets on its books at year end as follows:

Machinery	10% on original cost
Furniture and equipment	20% on net book value
Motor vehicles	40% on net book value

The value of loose tools at 31 December 2016 was estimated to be €3,400.

Required:

- a. Prepare the accounts for Machinery, Furniture and Equipment, Motor vehicles, Loose tools and the respective Depreciation allowance accounts, for the year ended 31 December 2016. Indicate clearly the end of year transfer to the Statement of Profit or Loss where applicable. (12)
- b. Prepare the Disposal Accounts. (3)
- c. Describe **THREE** causes of depreciation. (3)

(Total: 18 marks)

5. Mr. C Rover, a sole trader operating in the retail sector, does not maintain proper books of accounts. He considers that the increase in his bank account does not reflect the profit he expected to realise for the year ended 31 December 2016. He presents you with the following data and asks you to prepare his accounting statements for 2016:

	1 January 2016	31 December 2016
	€	€
Premises at net book value	120,000	132,000
Equipment at net book value	35,000	34,000
Motor vehicles at net book value	32,000	28,000
Trade payables	24,500	?
Trade receivables	42,600	37,400
Inventories	37,000	62,000

Bank transactions for 2016			
	€		€
Receipts from credit customers	285,600	Payments to trade creditors	373,180
Loan from father	50,000	Electricity	3,200
Receipts from cash sales	132,000	Wages and salaries	12,400
		Running expenses	5,800
		Freehold land purchase	20,000
		Motor vehicles	8,000
		Equipment	5,800

You are also given the following information:

- Every week, the total cash sales were banked with the exception of €380 which the owner kept for himself and €140 which he paid for cleaning of premises. C Rover's business operated for 52 weeks during the year.
- During the year the owner took goods costing €3,680 for his personal use.
- At the beginning of the current financial year, C Rover had borrowed €50,000 from his father, which he included in his bank deposits. The agreed interest was to be 8% per annum but, up to 31 December 2016, no interest had been paid or provided for.
- All sales are made at a uniform gross profit mark-up of 25%.
- Discounts received totalled €8,300 and discounts allowed €11,600.
- Goods returned by credit customers amounted to €18,300; while returns outwards were €9,400.
- Bad debts during the year were €5,360.

Required:

- Prepare the Trade Receivables and Trade Payables Control Accounts for 2016. (8)
- Prepare a Statement of Profit or Loss for the year ended 31 December 2016. (6)
- Describe **TWO** generally accepted accounting principles adhered to in the preparation of annual financial statements. (4)

(Total: 18 marks)

Section C

Answer any **TWO** questions from this Section. Each question carries **20** marks.

6. The following details relate to the production of 1,000 units during the current period:

	€
Material	50,000
Direct labour	36,000
Variable overheads	18,000
Fixed overheads	10,000

Sales revenue from the sale of the 1,000 units shall amount to €120,000.

During the forthcoming period it is expected that material costs will increase by 10%, labour by 25% and all other costs by 20%. Selling price per unit is projected to increase to €140 per unit. Sales demand is expected to remain the same.

Required:

- a. For each of the two periods, assuming all units produced are sold:
 - i. calculate contribution per unit and the number of units that must be sold to break-even; (5)
 - ii. calculate the profit and the margin of safety. (5)
- b. For the current period only, draw a break-even chart and highlight the break-even point, the margin of safety and the profit. (5)
- c. For the current period only, calculate the number of units that must be sold to achieve a profit of €7,000. (5)

(Total: 20 marks)

Please turn the page.

7. The Wharfside Services plc has three production departments and two service departments. The budgeted overheads for 2017 are as follows:

Production Departments:	€
Manufacturing	36,000
Assembly	27,000
Finishing	21,000
Service departments:	
Maintenance	14,500
Stores	12,000

The service departments' costs are allocated as follows:

	Manufacturing	Assembly	Finishing	Maintenance
Stores	40%	25%	25%	10%
Maintenance	50%	30%	20%	

The projected activity levels of each production department is as below:

	<u>Machine hours</u>	<u>Labour hours</u>
Manufacturing	4,200	1,600
Assembly	840	3,200
Finishing	960	4,800

Direct labour costs €8 per hour. The Wharfside Services plc applies absorption costing using a job costing system. One particular job, Job A4, required direct material costing €220, and the following time in each production department:

	<u>Machine hours</u>	<u>Labour hours</u>
Manufacturing	8	8
Assembly	4	1
Finishing	6	1

Required:

- Calculate an overhead absorption rate for each production department using the absorption basis you deem appropriate. (10)
 - Calculate the total cost of Job A4 and the selling price if a profit margin of 25% is to be realized. (6)
 - Explain why you chose the specific basis of absorption for each of the three production departments in (a). (4)
- N.B. Round your calculations to two decimal places.

(Total: 20 marks)

8. A business enterprise, producing components for the maritime industry, employs production workers on a 40-hour week and remunerates them at the rate of €6.00 per hour. The management expects an output of 8 units per hour from each worker. The actual output per worker varies between 320 and 380 units per week, however, 10% of output units in excess of 320 result in some defect or other and are consequently scrapped. The management is considering the following two alternative remuneration methods:

Option A – Wages are purely based on piecework at €0.75 per unit produced.

Option B – The basic hourly wage is reduced to €4.80 per hour, but for every additional unit produced in excess of 8 per hour an extra amount of €0.75 per unit is paid.

Under both options being considered, the production workers shall not be remunerated for defective units.

Required:

- a. Calculate the gross pay per employee under the current remuneration scheme. (2)
- b. For both options being considered, calculate the weekly wage for one employee, if:
 - i. the minimum output units are produced;
 - ii. the maximum output units are produced. (14)
- c. Describe **TWO** advantages and **TWO** drawbacks to management of time based and piece rate remuneration schemes. (4)

(Total: 20 marks)