# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD UNIVERSITY OF MALTA, MSIDA

#### MATRICULATION EXAMINATION INTERMEDIATE LEVEL SEPTEMBER 2016

 SUBJECT:
 ACCOUNTING

 DATE:
 31st August 2016

 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. On 31 March 2016 Blue Seas plc extracted the following balances from its books:

	€
Ordinary Share Capital €0.50 per share	400,000
Share premium	50,000
General reserve	30,000
Retained earnings	45,000
8% Debentures	100,000
Freehold premises	420,000
Motor vehicles	254,000
Office equipment	210,000
Allowance for depreciation: Premises	36,000
Motor Vehicles	124,000
Office equipment	65,000
Revenue	1,378,000
Purchases	785,000
Inventories (1 April 2015)	56,000
Returns in	31,300
Returns out	4,500
Carriage in	22,000
Discount allowed	18,400
Discounts received	9,600
Loss on disposal of equipment	8,300
Other expenses: Selling and distribution	154,000
Administration	168,600
Debenture interest paid	2,600
Trade receivables	185,400
Trade payables	58,100
Bank (Credit balance)	15,200
Cash	1,400
Allowance for bad debts	1,600

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#### Other information:

- (i) As at 31 March 2016, Selling & Distribution expenses accrued amounted to €24,400, while Administration expenses prepaid were €9,400.
- (ii) The Allowance for bad debts is estimated at 2% of outstanding debts.
- (iii) Depreciate Motor vehicles at 40% on written down value.
- (iv) Depreciate Office Equipment at 25% and Properties at 5%, both on cost.
- (v) Inventories on 31 March 2016 were valued at €64,300.
- (vi) Provision is to be made for the debenture interest due and €608 for bank overdraft interest.
- (vii) The directors propose a transfer of €25,000 to the General Reserve.

#### **Required:**

- A. Prepare the Statement of Profit or Loss of Blue Seas plc for the year ended 31 March 2016. (10 marks)
- B. Prepare the Statement of Financial Position of Blue Seas plc as at 31 March 2016.

  (9 marks)
- C. Distinguish between the articles of association and memorandum of association and mention ONE aspect which one would expect to find in <u>each</u> document.

(5 marks)

# **Section B**

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

2. The following are the Statement of Profit or Loss and Statement of Financial Position of 2015, of two enterprises in the same business sector:

	Pro	<u>Prow</u>		<u>Stern</u>	
Statement of Profit or Loss	€	€	€	€	
Revenue		846,000		1,830,000	
Cost of sales		<u>564,000</u>		1,372,500	
Trading profit		282,000		457,500	
Selling & Distribution	74,900		143,000		
Administration	86,340		156,000		
Debenture interest	6,000	(167,240)	12,000	(311,000)	
Profit before tax		114,760		146,500	
Income tax		(52,428)		(55,950)	
Profit after tax		62,332	_	90,550	
			_		
Statement of Financial Position					
Non-Current Assets		432,000		595,000	
Current Assets: Inventories	58,500		117,000		
Trade receivables	63,000		214,750		
Bank	26,100	147,600	-	331,750	
		579,600		926,750	
Equity:			=		
Issued Share Capital		300,000		500,000	
Share Premium		40,000		30,000	
General Reserve		25,000		-	
Retained earnings		30,332		40,550	
C		395,332	_	570,550	
Long term liabilities:				·	
6% Debentures		100,000		-	
8% Debentures		-		150,000	
Current Liabilities:					
Trade payables	84,268		169,750		
Bank Overdraft	-	84,268	36,450	206,200	
		579,600		926,750	

Additional information:ProwSternOpening inventories38,00095,000

## Required:

- A. Calculate the following ratios for both Prow and Stern:
  - 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) Trade receivables collection period
  - ix) Trade payables payment period

(*9 marks*)

B. Using the ratios calculated in (A), identify the aspect of business in which Prow's performance is not as good as that of Stern and give possible reasons for this.

(9 marks)

3. Peter Crest started his business on 1 January 2015 as a sole trader in the marine sector. He did not maintain proper accounting records. Crest opened a business bank account with €20,000. He borrowed €8,000 from his girlfriend, which he deposited in the bank, to help in the acquisition of inventories. Interest on the loan was agreed at 6% per annum. Crest transferred to the business his personal computer and office furniture valued at €480 and €2,240, respectively. These were valued at €1,800 in total at year end.

From the bank statement, you determine that the following payments were made during the year:

	€
Rent	5,200
Electricity	4,200
Office expenses	2,800
Motor costs	6,500
Deposit on van	5,000

The deposit was paid for a new motor van costing €23,000, the balance to be paid in three equal instalments, the first falling due in January 2016. The motor van was to be written off in equal instalments over 5 years with a residual value estimated at 20% of its original cost.

You also determine that the total of receipts from customers deposited in the bank during the year amounted to €134,500. Crest assures you that he banked all of his receipts except for the following cash transactions:

- Drawings of €7,500
- Sundry expenses amounting to €560
- Cash purchases of €3,800

During the year, two customers owing between them €1,540 defaulted and this amount was written off. At the end of the year, trade receivables amounted to €18,500.

Discounts allowed were  $\in 2,100$ , while returns in and returns out totalled  $\in 12,300$  and  $\in 8,600$ , respectively.

As at year end, electricity accrued amounted to  $\in$ 760 and rent was prepaid by  $\in$ 540.

Records of purchases are not very reliable, but Crest is certain that all sales were made at a uniform profit mark-up of  $33\frac{1}{3}\%$  on cost. Crest also tells you that at one stage he took goods costing €580 for his own private use. Inventories on 31 December 2015 were valued at €34,500.

#### Required:

A. Prepare the Sales Ledger Control Account for the year ended 31 December 2015.

(4 marks)

- B. Prepare the Statement of Profit or Loss for the year ended 31 December 2015, showing clearly the total purchases made during the year. (10 marks)
- C. Explain the accounting treatment of goods taken by the owner for personal use, and state the underlying concept. (4 marks)

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- **4.** John Mast had problems with the presentation of his final accounts as the draft trial balance for the year ended 31 March 2016 did not balance. The total credits exceeded total debits by €580 and profits declared were €42,300. You are asked to review his workings and adjust for any resulting discrepancies. You discover the following errors:
- (i) A payment of €860 to supplier Albert Agius was debited to the account of Alfred Agius.
- (ii) A customer who had been written off as a bad debt, paid the company €650. This transaction was considered as sales and posted to the sales account.
- (iii) A payment of €1,500 to a credit supplier was posted to the purchases account.
- (iv) Discount allowed totalling €560 were posted as the Discounts Received.
- (v) A sale of goods of  $\in$ 430 was correctly transferred to the Sales Account but posted to the personal account of the customer as  $\in$ 340.
- (vi) Cheques received for sales totalling €950 were only entered in the bank account.
- (vii) Goods costing €720 taken by Mast for his personal use were not recorded.
- (viii) Purchases Ledger balances were undercast by €840.

## Required:

- A. Prepare journal entries to correct the above errors and omissions. (9 marks)
- B. Prepare the Suspense Account, and calculate the revised net profit. (5 marks)
- C. Explain why a Trial Balance should balance if no errors or omissions occur in posting the accounts and extracting the accounts at year end. (4 marks)

5. Springer plc is a manufacturer of goods for the catering industry. The following is the company's trial balance as at 31 March 2016:

	€	€
Freehold property	500,000	41,700
Plant & Machinery/Depreciation allowance	1,200,000	420,000
Motor vehicles/Depreciation allowance	160,000	42,500
Fixtures/Depreciation allowance	120,000	28,300
Inventories: Raw Material	85,000	
Finished goods	68,500	
Work-in-progress	54,000	
Purchases	524,000	
Returns in/out	15,300	9,600
Revenue		1,430,000
Direct wages	386,700	
Factory supervisors' wages	46,000	
Power and electricity	35,000	
Other manufacturing expenses	16,200	
Transport expenses	29,500	
Office salaries and wages	52,100	
Insurance	24,600	
5% long term bank loan		100,000
Bank		42,000
Cash in hand	2,900	
Trade receivables/Trade payables	85,500	96,000
Ordinary share capital		800,000
Share premium		200,000
General reserve		150,000
Retained earnings		45,200
	3,405,300	3,405,300

### Other information:

(i) Inventories at 31 March 2016:

	₹
Raw materials	68,000
Finished goods	82,400
Work-in-progress	73,000

(ii) Provide for depreciation as follows:

Freehold property 2% on cost

Plant & machinery 20% on net book value

Motor vehicles, Fixtures 20% on cost

(iii) Apportion the following costs as follows:

	Factory	Administration & Selling
Electricity and power	65%	35%
Transport expenses	25%	75%
(including depreciation	(to be considered as carriage in)	
of motor vehicle)		
Insurance	60%	40%
Depreciation of property	80%	20%

- (iv) Included in trade receivables is an amount of €2,600 which is considered irrecoverable.
- (v) Insurance was prepaid by €4,600, while direct wages still due amounted to €15,600.
- (vi) The Bank Loan was drawn down on 1 April 2013, and interest is payable annually in arrears. Loan interest and interest of €2,300 on bank overdraft have not been accounted for.

### Required:

- A. Prepare the Manufacturing Account <u>and</u> the Statement of Profit or Loss for Springer plc for the year ended 31 March 2016. (14 marks)
- B. Distinguish between factory direct costs and factory indirect costs, and give ONE example of each type of factory cost. (4 marks)

### **Section C**

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

**6.** Below are the budgeted overheads of the three production and two service departments of The Jolly Roger plc for the month of September:

Cutting	As sembly	Finishing	Maintenance	Storage
€	€	€	€	€
32,000	28,000	24,000	4,000	6,000

The service departments' expenses are apportioned as follows

	Cutting	Assembly	Finishing	Storage
Maintenance	50%	15%	25%	10%
Storage	40%	30%	30%	

The budgeted level of activities of each of the three production departments in machine and labour hours were:

	Cutting	Assembly	Finishing
Machine/hours	800	120	360
Labour hours	250	960	420

Job No. 73 requires material costing €2,400. The job takes 5 labour hours in each of the three departments. Direct labour costs €15 per hour. The machine hours required in each department are as follows: 8 hours in the cutting shop; 12 hours in assembly; and 4 hours in the finishing department.

#### Required:

- A. Calculate a machine/hour overhead absorption rate and a labour/hour absorption rate (correct to 2 decimal places) for <u>each</u> production department for the month of September.

  (8 marks)
- B. Calculate the cost of Job No. 73, using the absorption rate you deem appropriate for each department. (8 marks)
- C. Give reasons for the choice you made in (B) for the absorption rate of each department. (4 marks)

7. Railing plc is in the production planning stage for the three months ending 31 March 2017. Fixed costs for the three-month period amount to €24,000. Each unit sells on the market at €48. At present, the variable costs incurred in the production of each unit are:

€Material 16Labour 24

At present, the company does not have welding facilities and subcontracts the welding work required. The cost of subcontracting is incorporated in the material cost per unit. The company is not satisfied with its production methods and asks its management accountant to seek alternatives for a more efficient production process. After research, she presented them with two options for the production of their uniform product:

#### Option No.1

Subcontract the total production process to an outside firm, at a cost of  $\in$ 42 per unit. This option would decrease fixed costs by  $\in$ 6,000 for the three-month period.

#### Option No. 2

Invest in a welding facility and do all the work internally without subcontracting. According to the accountant's research the running of the facility, including depreciation, would increase fixed costs by €8,000 over three months. In spite of saving on the subcontracting costs, material cost per unit would increase to €20 because of wastage during the welding process.

#### Required:

- A. Determine the break-even point in number of units sold, for the current situation and for each of the two options. (10 marks)
- B. For each of the three scenarios, calculate the number of units that must be sold so that Railings plc makes a profit of €21,600 during the three-month period.

(6 marks)

C. Determine whether Option 1 is better than the current situation. Explain your decision. (4 marks)

**8.** During the four months ended 30 April 2016, Trailers plc recorded the following movements in the inventory of one of its products:

	Purchases (units)	Cost/unit (€)	Issues (units)
January	1,800	2.20	2,100
February	2,600	1.90	2,300
March	2,440	2.10	1,600
April	1,280	2.40	1,800

On 1 January 2016, there were 780 units in store costing €1,482 in total. It is company policy to value its inventories using a weighted average cost system (AVCO). The company is considering changing the present valuation system to the first in first out method (FIFO).

### Required:

- A. Calculate the value of closing inventories at the end of each month using:
  - i. AVCO
  - ii. FIFO (16 marks)
- B. Explain to the directors in which circumstances would using the FIFO instead of the AVCO method result in higher profits and why. (4 marks)