



National  
Qualifications  
2017

**X700/76/11**

**Accounting**

WEDNESDAY, 24 MAY

9:00 AM – 11:00 AM

**Total marks — 100**

**SECTION 1 — 40 marks**

Attempt THIS question.

**SECTION 2 — 60 marks**

Attempt ALL questions.

You may use a calculator.

All working should be shown fully, and clearly labelled.

Write your answers clearly in the answer booklet provided. In the answer booklet, you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.



\* X 7 0 0 7 6 1 1 \*

## SECTION 1 — 40 marks

MARKS

Attempt THIS question

1. Cameron's plc manufactures high quality sofas and chairs for the interior design market. The business has 3 production departments (A, B and C) and 2 service departments (D and E). The following data has been provided:

Indirect Wages	Dept A	£60,000	
	Dept B	£27,400	
	Dept C	£21,250	
	Dept D	£26,000	
	Dept E	£9,700	£144,350
Insurance of Property			£23,000
Supervisor's salary			£30,000
Rent and rates			£166,750
Power			£34,600
Depreciation of Plant and Machinery			£56,000
<b>Total</b>			<b>£454,700</b>

Additional Information:

	Dept A	Dept B	Dept C	Dept D	Dept E
Area (sq m)	4,000	2,000	1,000	1,500	3,000
No of employees	30	24	20	10	16
Metered power (kw hrs)	1,620	240	200	600	800
Plant and Machinery at cost	£150,000	£40,000	£10,000	£20,000	£60,000
Direct machine hours	22,000	12,000	2,875	3,000	1,000
Direct labour (at £12 per hour)	£162,000	£360,000	£252,000	–	–

- (a) Prepare an overhead analysis statement to allocate and apportion overheads to the cost centres. 11
- (b) Re-apportion the costs of service department E to the other departments on the basis of number of employees. 2
- (c) Re-apportion the costs of service department D to the other departments on the basis of machine hours. 3
- (d) Calculate the overhead absorption rate for each of the production departments as follows:
- Dept A – direct machine hours
- Dept B – percentage of direct labour cost
- Dept C – direct labour hours. 4

## 1. (continued)

Actual production department data for the period is as follows:

	Dept A	Dept B	Dept C
Direct machine hours	20,500	25,000	23,250
Direct labour cost	£180,000	£370,000	£275,000
Direct labour hours	21,300	20,000	19,750
Overheads	£242,000	£122,400	£75,000

- (e) Calculate the amount of overhead over/under absorbed in each department. Your answer must clearly state whether the amount is over or under absorbed.

6

Cameron's plc is in the process of putting together a quote for a client, who has requested information as to the cost of producing 20 luxury sofas for their hotel. The following data has been made available for Job CC006.

**Direct Material:**

Material X – 10 metres per sofa @ £20 per metre

Material Y – £10 per metre— used at a rate of 1 metre for every 10 of Material X

Stuffing material – 4 kg per sofa. Stuffing material is provided in large rolls of 200 kg, each of which costs £500.

**Direct Labour:**

Dept A – 40 labour hours

Dept B – 20 labour hours

Dept C – 6 labour hours

**Machine Hours:**

Dept A – 40 hours

Dept B – 30 hours

Dept C – 20 hours

Direct expenses are expected to total £239.

Profit margin is set at 25%.

- (f) Prepare a job cost statement to calculate the selling price of Job CC006.

11

For the year ahead, the Finance Director is considering using a factory wide overhead absorption rate, based on units produced. Current estimates show that fixed costs are likely to be £420,000 and that production is expected to be 10,000 units.

- (g) (i) Calculate the estimated overhead absorption rate for the coming year. 1  
(ii) Calculate the change in the total cost of Job CC006, if the factory wide overhead absorption rate had been applied. 2

## SECTION 2 — 60 marks

Attempt ALL questions

2. The following budget data relates to the firm of M & M plc for the period July to December Year 2.

	July	August	September	October	November	December
Sales (units)	5,600	6,000	6,400	6,100	6,200	6,300
Production (units)	6,000	6,500	6,200	6,300	5,900	6,100

The following information is also available:

1. Cash and Cash Equivalents balance at 1 September is expected to be £9,500.
  2. The retail selling price per unit is £50.
    - Credit sales account for 75% of all sales, these are sold to trade customers who receive a 10% discount on the retail selling price providing they pay within one month.
    - 80% of all credit sales are paid for one month after sale, the remainder of the credit sales are paid two months after sale, however, 5% of the amounts due from these customers are expected to be bad debts.
  3. Sales expenses of £2 per unit are to be paid on all sales in the month following sale.
  4. Unit costs are as follows:
    - Materials – £25 per unit, payable in the month before production;
    - Labour – £11 per unit, payable in the month of production;
    - Labour Bonus – £3 per unit will be paid on all units produced over 6,300. This will be paid in the month following production.
  5. Fixed Overheads are £4,000 per month, excluding depreciation of £1,000.
  6. New machinery is to be bought and paid for in September for £120,000. A loan of £80,000 will be received from the bank in September to help finance this. The loan will be repaid in 10 equal monthly instalments beginning in October, 5% interest will be added to the monthly repayment.
- (a) Prepare the Cash Budget for September to November Year 2. 18
- (b) Explain 2 advantages for a management accountant of using a spreadsheet to prepare a Cash Budget. 2

[Turn over for next question

**DO NOT WRITE ON THIS PAGE**

3. The following is a list of balances extracted from the financial records of McBean plc as at 31 December Year 2.

	£000
Sales Revenue	1,800
Factory Machinery at cost	100
Property at cost	838
Inventories at 1 January Year 2:	
Raw Materials	80
Work in Progress	60
Finished Goods	40
Production wages	520
Factory indirect labour	68
Purchase of Raw Materials	600
Carriage on Raw Materials	20
Insurance	27
Electricity	55
Royalties	48
Warehouse wages	45
Provision for depreciation: Factory Machinery as at 1 January Year 2	40

#### NOTES

At 31 December Year 2, the following additional information was made available:

- Inventories at 31 December Year 2 were as follows:
 

Raw Materials	£30,000
Work in Progress	£54,000
Finished Goods	£64,000
- On 31 December Year 2, Production wages of £10,000 were payable and Insurance of £2,000 was receivable.
- Electricity had only been paid up to the end of November Year 2. It is to be apportioned as follows:  
Factory – 80%, Warehouse – 15%, Administration – 5%
- Insurance is to be apportioned as follows:  
Factory – 60%, Warehouse – 20%, Administration – 20%
- All non-current assets are to be depreciated at the rate of 10% using the diminishing balance method.
- In Year 2 finished goods have been estimated to have a current market value of £1,380,000.

3. (continued)

- (a) Prepare the Manufacturing Account and an Income Statement up to Gross Profit for the year ended 31 December Year 2. 19
  
- (b) Explain how either profit or loss on manufacture is treated in the Income Statement. 1

[Turn over for next question

4. The following data relates to Year 3 of the firm Walker plc which manufactures 3 products.

	Product A	Product B	Product C
Selling Price per unit	£25	£50	£48
Material Cost per unit	£6	£10	£7
Labour Cost per hour	£3	£2	£3
Variable Overheads per unit	£4	£2	£4
Labour hours per unit	2	3	4
Machine hours per unit	3	4	10
Sales and Production (units)	8,000	5,000	3,500

Annual Fixed Costs in Year 3 are £200,000.

(a) Calculate:

- (i) the total machine hours worked in Year 3;
- (ii) the unit contribution;
- (iii) the total profit for Year 3.

9

In Year 4 it is estimated that the total machine hours will be reduced by 22% and the demand for unit sales of each product will decrease by 10%.

In Year 4 annual Fixed Costs will increase by 5%.

(b) You are required to calculate for Year 4:

- (i) the quantity of each product to be produced and sold to maximise profits;
- (ii) the total profit for Year 4.

10

(c) Explain the term Equity Gearing.

1

[END OF QUESTION PAPER]