National
Qualifications
2019

X800/76/11 Accounting

FRIDAY, 17 MAY
9:00 AM – 11:30 AM

Total marks — 120

SECTION 1 — 80 marks

Attempt ALL questions.

SECTION 2 — 40 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.

SECTION 1 — 80 marks **MARKS**

Attempt ALL questions

1. Lucas plc has 3 production departments (A, B and C) and 2 service departments (D and E). The company uses a factory-wide overhead absorption rate when calculating the cost of jobs passing through the factory.

The following data relates to Job 99.

Direct material

Material X — 5,000 kg @ £10 per kg
Material Y — 2,500 kg of material Y which is provided in large batches of 10,000 kg, each 10,000 kg batch costs £80,000
Material Z — 1,000 kg @ £30 per kg.

Direct labour

A total of 24,000 labour hours will be used to complete Job 99. These will be used in departments A, B and C in the ratio of 3:2:1. Labour rates in each department are as follows

Dept A — £12 per hour
Dept B — £8 per hour
Dept C — £10 per hour.

Machine hours required to complete Job 99 are as follows

Dept A — 3,000 hours
Dept B — 12,600 hours
Dept C — 3,000 hours.

Overheads are recovered on a factory-wide basis of £3 per direct labour hour. Lucas plc applies a profit margin of 30% to all jobs.

(a) Prepare a Job Cost Statement to calculate the selling price of Job 99. **9**

(b) A new Finance Director has been appointed. She has decided to use departmental absorption rates to recover overheads. These rates are to be based on the following information.

Overhead costs	Total cost
Indirect labour	£81,800
Depreciation of machinery	£72,000
Heat and light	£104,000
Factory administration	£9,000
Machinery running costs	£150,000
Rent and rates	£26,000

1. (continued)

	Dept A	Dept B	Dept C	Dept D	Dept E	Totals
Indirect labour	£30,000	£13,100	£18,700	£12,300	£7,700	£81,800
Area (sq m)	20,000	10,000	17,000	3,000	2,000	52,000
No of employees	400	160	240	40	60	900
Plant and machinery at cost	£180,000	£160,000	£240,000	£80,000	£60,000	£720,000
Direct machine hours	36,000	34,000	24,000	4,000	2,000	100,000
Direct labour hours	50,000	24,000	36,000	6,000	4,000	120,000

(i) Prepare an overhead analysis sheet to calculate the total overheads allocated and apportioned to all 5 departments. **16**

(ii) Re-apportion the total costs of Department D to the other 4 departments on the basis of direct labour hours. **3**

(iii) Re-apportion the total costs of Department E to the 3 production departments on the basis of direct machine hours. **3**

(c) (i) Calculate the overhead absorption rate applied to

Department A — based on direct labour hours

Department B — based on direct machine hours

Department C — based on direct labour hours. **3**

(ii) Calculate the increase or decrease in the overheads applied to Job 99 by using the new departmental overhead rates rather than the factory-wide rates. **5**

(d) Outline the impact of 'under' absorption of overheads on profit. **1**

[Turn over

MARKS

2. Part A

Newben plc makes 3 products and in Year 10 is working at 80% capacity. The following information is available regarding the manufacture of products A, B and C.

	Product A	Product B	Product C
Selling price per unit	£120	£90	£106
Sales demand in units	1,000	4,000	3,500
Machine hours per unit	3	4	2
Material in kg per unit	5	3	4
Labour hours per unit	3	1	3

Material cost	£3 per kg
Labour	£12 per hour
Variable overheads	£5 per labour hour
Annual fixed costs	£70,000

(a) Using the information above, for Year 10 calculate

(i) total machine hours required

(ii) contribution per unit

(iii) profit for the year. **9**

For Year 11 Newben plc is considering the issues of both machine capacity and profit maximisation. Market research has indicated that maximum sales demand for each product will be

Product	Sales demand (units)
A	4,000
B	3,500
C	5,000

In an attempt to meet this demand and maximise profits Newben plc will have to work at full capacity.

(b) Calculate for Year 11

(i) total machine hours at full capacity

(ii) the quantity of each product to be produced in order to maximise profit

(iii) total contribution

(iv) total profit if fixed costs increase by 15%. **9**

2. (continued)

Newben plc is considering the following proposal for Year 12.

To increase demand for Product A, Newben plc plans to reduce its selling price to £117 per unit. Demand is expected to increase by 400 units. Fixed costs will remain as Year 11 and they will continue to operate at full capacity.

(c) Calculate the expected profit for Year 12 if the changes are implemented. **6**

(d) Recommend to Newben plc whether they should implement the proposed change for Year 12 and justify your answer. **1**

2. Part B

Petroscot produces their product using 2 separate processes, refining and mixing. The mixing process combines 2 litres of Material A with 1 litre of Material B.

Cost data for the mixing process for the month of May is as follows

Materials	4,000 litres of Material A from the refining process at £5 per litre
Additional materials	? litres of Material B at £2 per litre
Labour	3,000 hours of direct labour at £12 per hour.

Overheads are to be charged as follows

Variable overheads	£2·50 per litre of total input materials
Fixed overheads	£6,000.

Other forecasted data

Normal loss	5% of total input quantity
Closing work-in-progress	500 litres valued at £1,800
Completed output to stores	5,000 litres.

All losses are to be sold for £4 per litre.

(a) Using the information shown above, **prepare** for the month of May the

(i) Mixing Process Account showing quantities, cost and values **9**

(ii) Abnormal Loss Account. **3**

(b) (i) Outline **one** feature of process costing. **1**

(ii) In connection with process costing, distinguish between normal loss and abnormal loss. **2**

[Turn over

SECTION 2 — 40 marks

Attempt ALL questions

3. Coulter and Co plc is a manufacturing business.

Ledger balances as at 31 December Year 3 were as follows

	£000
Sales Revenue	1,950
Factory Machinery at cost	630
Delivery Vehicles at cost	250
Inventories at 1 January Year 3:	
Raw Materials	80
Work-in-Progress	45
Finished Goods	110
Rates	33
Production Wages	120
Management Salaries	60
Factory Indirect Labour	111
Purchase of Raw Materials	200
Carriage In on Raw Materials	3
Carriage Out	4
Factory (indirect) Power	10
Advertising	25
Repairs to Factory Machinery	14
Bad Debts	6
Factory Heat and Light	23
Selling Expenses	120
Royalties Paid	5
Debenture Interest	10
Warehouse Expenses	47
Provisions for Depreciation as at 1 January Year 3:	
Factory Machinery	200
Delivery Vehicles	50
Factory Cleaning	30

MARKS

3. (continued)

The following additional information was made available at 31 December Year 3.

1. Inventories at 31 December Year 3 were as follows
   Raw Materials — £60,000
   Work-in-Progress — £15,000
   Finished Goods — £90,000.

2. On 31 December Year 3, Rates of £7,000 were payable.

3. The following expenses are to be apportioned as follows

	Factory	Warehouse	Admin
Rates	80%	–	20%
Management Salaries	75%	10%	15%

4. All Non-Current Assets are to be depreciated at the rate of 20% using the reducing balance method.

5. Factory cleaning costs have been paid for the 15 months ending 31 March year 4.

6. The work completed in Year 3 has been estimated to have a Market Value of £1,000,000.

(a) (i) Prepare the Manufacturing Account for the year ended 31 December Year 3. **13**

(ii) Prepare the Income Statement (up to Gross Profit) for the year ended 31 December Year 3. **6**

(b) Describe the term Work-in-Progress. **1**

[Turn over

4. The Income Statement of Cromer plc for the year ended 31 December Year 4 has been completed to the Profit for the Year after Tax. The following information is also available.

	£000	£000
Profit for the Year after Tax		90
Corporation Tax Payable		30
Unappropriated Profit 31 December Year 3		36
400,000 6% Preference Shares £1 each		400
400,000 Ordinary Shares £1 each		400
VAT	28	
Provision for Doubtful Debts 31 December Year 4		6
Trade Receivables	44	
Trade Payables		32
Share Premium		150
Cash and Cash Equivalents	7	
Goodwill	20	
Preliminary Expenses	60	
Property (at cost)	690	
Office Equipment (at cost)	300	
Motor Vehicles (at cost)	180	
Provisions for Depreciation at 31 December Year 4:		
Office Equipment		172
Motor Vehicles		54
Closing Inventory	26	
Admin Expenses Payable		4
Selling Expenses Receivable	4	
Ordinary Dividend Paid	15	
	1,374	**1,374**

Notes at 31 December Year 4

1. At 31 December Year 4 a bonus issue of 50,000 Ordinary Shares was made. This issue was financed by a transfer from the Share Premium Account. This has yet to be recorded in the accounts.

2. Property is revalued at £720,000.

3. Write-off the Preliminary Expenses by transfer from the Share Premium Account.

4. Goodwill is to be written down by £8,000.

5. The preference dividend has been paid by cheque, but no transactions have been made.

MARKS

4. (continued)

(a) The Income Statement has been completed to determine Profit for the Year after Tax.

Prepare

(i) the remainder of the Income Statement to determine the Unappropriated Profit for the year ended 31 December Year 4 **3**

(ii) a Statement of Financial Position as at 31 December Year 4. **15**

(b) Compare Debentures with Preference Shares. **2**

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