

Wednesday 1 May 2024 9:00 to 12:10

Paper 5

Module 3P8: FINANCIAL AND MANAGEMENT ACCOUNTING

Module 3P9: INDUSTRIAL ECONOMICS, STRATEGY AND GOVERNANCE

Answer four questions, two from each of sections A and B.

All answers must appear in four separate booklets.

All questions carry the same number of marks.

*The **approximate** percentage of marks allocated to each part of a question is indicated in the right margin.*

Write your candidate number not your name on the cover sheet of each booklet.

STATIONERY REQUIREMENTS

8 page answer booklet x 4

Rough work pad

SPECIAL REQUIREMENTS TO BE SUPPLIED FOR THIS EXAM

CUED approved calculator allowed

Engineering Data Book

10 minutes reading time is allowed for this paper at the start of the exam.

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so.

You may not remove any stationery from the Examination Room.

SECTION A

Answer two questions from this section.

Question 1

Augustus Ltd.'s finance manager has prepared a draft trial balance for the business as at 31 May 2022 which is presented below:

	Dr	Cr
	£'000	£'000
Capital account – as at 1 June 2021		30.0
Plant and machinery – cost as at 1 June 2021	72.0	
Plant and machinery – accumulated depreciation as at 1 June 2021		25.0
Allowance for receivables – as at 1 June 2021		3.1
Inventory – 1 June 2021	18.7	
Finance costs	0.3	
Cash/Bank overdraft		7.4
Administrative expenses	65.8	
Distribution expenses	31.2	
Trade receivables	20.0	
Revenue		230.0
Dividend	18.0	
Trade payables		17.5
Purchases	90.0	
8% Loan – repayable on 31 July 2026		3.0
Total	<u>316.0</u>	<u>316.0</u>

Since this draft was prepared, the following information was updated.

- It has been determined that trade receivables of £600 are irrecoverable. In addition, it was decided that the allowance for receivables should be reduced by £500.
- Depreciation on plant and machinery is charged at 20% per annum on a reducing balance basis.
- The loan was taken out on 31 July 2021 and interest has not yet been paid or accrued.
- The closing inventory had been valued at £17,500. It was subsequently discovered that some items of inventory which had cost £5,000 actually have a net realisable value of £3,800.

(cont.)

- At 31 May 2022, a prepayment for insurance of £400 had not yet been accounted for. Insurance is classified as an administrative expense.
 - At 31 May 2022, an accrual for freight and delivery expenses amounting to £400 had not yet been accounted for. Freight and delivery expenses are classified as distribution expenses.
- a) Provide a profit and loss account for the year ending 31 May 2022. [35%]
- b) Provide a detailed balance sheet as at 31 May 2022. [40%]
- c) The distribution manager is concerned about stock turnover, which she feels must be higher than the industry average of 60 days. She feels this ratio should be their only priority. Discuss this approach and any other financial priorities for the company to address in the next year. [25%]

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Question 2

Ash Ltd. manufactures a single product, the REX. The REX comprises two materials, material R and material X. The standard variable cost for this item for 2022 is as follows:

	£	£
Materials R (8kg @ £0.30/kg)	2.40	
Materials X (4kg @ £0.50/kg)	2.00	4.40
Labour (3 hours @ £10.50/hour)	<hr/>	31.50
Variable overhead (3 hours @ £0.50/hour)		1.50
Total		<hr/> 37.40

Fixed Overheads are budgeted at £5,600. The standard sales price per unit is £40. The company budgeted to sell 3000 units with no overproduction. They actually sold 2800 units with no overproduction, yielding sales revenue of £113,120. Actual costs for the year:

Item	Cost
R 19,000 (Kg)	£7,410
X 14,000 (Kg)	£10,220
Labour 8,300 (h)	£84,740
Variable overhead	£4,067
Fixed overhead	£8,250

- a) Show the original budget, flexed budget and actual results. [35%]
- b) Prepare an Operating Statement Analysis, which reconciles the budgeted contribution with the actual profit/loss. [40%]
- c) Discuss the results of the Operating Statement Analysis, including the actions which the management might consider. [15%]
- d) Discuss the advantages and disadvantages of variance analysis. [10%]

Question 3

Delphi Ltd. has a potential new product. The following forecast sales and costs have been estimated for the new product.

Year	Sales	Expenses (excludes royalties and depreciation)
	£'000	£'000
1	340	-40
2	270	-130
3	320	-160
4	345	-185
5	431	-205
6	330	-160
7	201	-100
8	145	-47
9	85	-28
10	39	-8

Having purchased a licence for some parts of the technology, Delphi will need to pay royalties to the owner of the licence at a rate of 10% of the prior year sales, for the first five years of the project, payable in arrears. Delphi's cost of capital is 10%. The capital outlay is for a specialist machine, which will last 10 years, at a cost of £700,000 on day 1 of year 1 of the venture. Assume that the machine will be depreciated on a straight-line basis. The machine will be sold on the last day of the 10 year project and has an expected scrap value of £5,000.

- a) Advise Delphi Ltd. on whether to invest in this new product based on each of the following appraisal methods. Comment briefly on the relative merits of each method (a discount table is provided in Table 1):
- the payback period
 - the accounting rate of return
 - the net present value
 - the internal rate of return

[80%]

(cont.)

Interest rate p.a., r	Number of years, T	Present value of £1 receivable at the end of T years, $PV = \frac{1}{(1+r)^T}$
5%	1	0.9254
	2	0.9070
	3	0.8638
	4	0.8227
	5	0.7853
	6	0.7462
	7	0.7107
	8	0.6768
	9	0.6446
	10	0.6139
10%	1	0.9091
	2	0.8264
	3	0.7531
	4	0.6830
	5	0.6209
	6	0.5645
	7	0.5132
	8	0.4665
	9	0.4241
	10	0.3855
15%	1	0.8696
	2	0.7561
	3	0.6575
	4	0.5718
	5	0.4972
	6	0.4323
	7	0.3759
	8	0.3269
	9	0.2843
	10	0.2472
20%	1	0.8333
	2	0.6944
	3	0.5787
	4	0.4823
	5	0.4019
	6	0.3349
	7	0.2791
	8	0.2326
	9	0.1938
	10	0.1615

Table 1

- b) Discuss what other financial information might be required and how this could be helpful in making an informed decision on whether to invest in this new product.

[20%]

SECTION B

Answer two questions from this section.

Question 4

- a) Discuss why patents might be more effective in protecting product innovations than they are in protecting process innovations. Give examples to support your answer. [50%]
- b) Discuss how turbulent business environments might influence a large firm's outsourcing decisions. Give examples to support your answer. [50%]

Question 5

A Small Enterprise has historically machined and assembled fuel pumps for luxury cars. That market is declining. The company has begun to supply parts to the growing e-bike sector in the UK and Europe. The company is planning to scale up its operations and is considering how to innovate its *business model*.

- a) Name and describe the key elements of a *business model*? [20%]
- b) Propose two alternative business models that would enable this company to scale up its operations. [60%]
- c) Discuss the limitations of your approach. [20%]

Question 6

- a) What is the significance of *Transaction Costs Theory*. [20%]
- b) Discuss the significance of Transaction Cost Theory for both small and large firms. Give Examples to support your answer. [80%]

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